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BILLITON AUSTRALIA  
THE METALS DIVISION

OF THE SHELL GROUP OF COMPANIES IN AUSTRALIA

Evaluation of the Old Royal George Tin Mine

E.L. 7/78, N.E. Tasmania

**OPEN FILE**

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SUMMARY

A complete evaluation of the Royal George tin mine is the subject of this report.

The Royal George mine is located 17 km east of Avoca in NE Tasmania.

Cassiterite occurs in steeply dipping, NW trending greisenized granitic lodes hosted by highly differentiated equigranular, porphyritic and fine grained variants of the Ben Lomond granite.

The Royal George mine is covered by two Mineral Leases due to expire in 1986. The northern part of the deposit dips SW under private farm land (including mineral right titles) belonging to Mr. A. Gee.

Underground development includes 4 levels on an inclined shaft. Workings are currently flooded.

Metallurgical testwork suggests a 90% recovery with credits of Ag (12 g/t) and Zn (0.21%)

Ore reserves based on 18 cored drillholes and limited sampling of underground developments are calculated at 590,560 tonnes at 0.41% Sn using a 0.25% Sn cutoff, minimum 3m grade true width and a specific gravity of 2.85 (Purvis 1979 - CRAE). Due to the inadequacies of the drilling (small core diameter - EX + A and core loss in mineralized zones) a reserve with a 25% increase in individual assay grade was computed giving 1,168,760 tonnes at 0.34% Sn with a 0.2% Sn cutoff. At a maximum of 6000 tonnes of tin the Royal George deposit is sub-economic.

## 1.0 INTRODUCTION

The Old Royal George tin mine is situated 17 km by road east of Avoca, NE Tasmania (Fig. 1 & 2). Mineral Lease 27M/65 held by the Cornwall Coal Company (21 year duration) covers the surface expression of the deposit which dips Sw under private property (including mineral rights) held by Mr. A. Gee.

The deposit consists of NW trending, steeply dipping, sulphide-bearing, sericitic and siliceous lodes hosted by medium grained equigranular and fine grained porphyritic tourmaline-bearing granite (Ruxton, 1983).

This report summarizes the geology and previous exploration of the Royal George deposit.

## 2.0 PREVIOUS WORK (Summary)

The Royal George mine was worked between 1911 and 1922 with 170,000 tonnes of ore grading 0.65% Sn (1105 tonnes of contained tin) exploited. (Purvis, 1979). Ore was won from a large open cut and 2 underground levels. (Plan D/LJ 01/09).

In 1955 torbenite was discovered in the open cut (the first uranium found in Tasmania). The lease holder Mr. A. Ringwood drilled one hole followed by 3 holes by BHP to test for significant uranium. Assay results were poor with downhole radiometric measurements of the BHP holes downgrading (Daly, 1958). Tin was reported at this stage but not investigated.

In 1965 the Cornwall Coal Company pegged several mining leases over the deposit and tailings dams. Between 1965 and 1971 Cornwall Coal drilled 13 diamond drillholes, deepened the inclined shaft and drove 2 additional levels (No. 3 and No.4).

Underground channel sampling, metallurgical testwork and an evaluation of the old tailings dam was completed. During this period the Tasmanian Mines Department provided geological assistance by surface and underground geological mapping, drillcore logging and the estimation of ore reserves. (Urquhart, 1967; Noldart, 1967).

CRAE took over exploration on the Royal George Mineral Leases and E.L. 7/78 in February, 1979 as managers of a Joint Venture partnership with Cornwall Coal. In a thorough evaluation of the Royal George deposit CRAE reassayed drill core and sample pulps, took several underground samples and drilled one deep hole (RGC 1) beneath the mineralized zone. Ore reserves were recalculated and a number of geophysical techniques tested to define further mineralization. Preliminary metallurgical work was started but not completed. The deposit was considered too small for CRAE. (Purvis, 1979 & 1981).

Between March and July, 1983 AMAX Australia were in Joint Venture with Cornwall Coal in E.L. 7/78 but no work was done on the Royal George deposit.

### 3.0 GEOLOGY

The Royal George deposit forms part of the St. Pauls tin field, NE Tasmania. NW-SE and E-W trending lode types typify the deposits of this area with Royal George and Roy's Hill examples of the former and Brookstead, Dykelode and Glenair of the latter (Fig. 3) Royal George is the largest known deposit with a potential for 1.7 mt at 0.34% Sn. (Purvis, 1981).

Tin mineralization occurs in subvertical greisenized granite lodes (Royal George, Brookstead etc) and fractured sedimentary rocks (Glenair) associated with the roof portions of the Ben Lomond granite. Geochemical and petrological studies have indicated

a high degree of element fractionation in the Ben Lomond granite. De Graaf (1983) defines the Ben Lomond granite as a contact or exogranitic-type typified by vein-related mineralization and with good potential for further tin deposits (when compared with granites of the Blue Tier Batholith).

The Royal George deposit is approximately 250m long, upto 20m wide (tapering to the N, S and at depth) with vertical extent of 150 to 200m. Mineralization thins to the north and south and at depth with a corresponding decrease in Sn grade. Additional strike length of 100m to the north and 280m to the south is low grade and narrow. Further mineralization occurs approximately 1 km to the south in the SE extension and Baileys Lode (Fig. 4). Both these prospects are confined and contain patchy tin values (Ruxton, 1983).

Three granite types crop out in the Royal George area; 1) medium grained equigranular biotite granite with upto 5% interstitial tourmaline; 2) fine grained porphyritic granite with phenocrysts of quartz and feldspar - (types 1 and 2 may contain pegmatitic quartz, K-feldspar and tourmaline clots); and 3) fine grained microgranite/aplite forming hard, generally narrow dykes which cross cut equigranular and porphyritic variants.

Cassiterite is confined to sericitic and siliceous greisenized granite lodes which trend NW and dip steeply ( $75^{\circ}$ ) SW. The Royal George deposit shows a large scale zonation with silicified lodes in the centre passing laterally and vertically downwards into sericitic alteration. Lode veins are generally less than 0.5m thick forming an en echelon arrangement both vertically and laterally suggesting a late stage structural control on their formation. The majority of cassiterite is finely disseminated in siliceous greisen material with the remainder forming as coarse grained crystals on central lode fractures. Lode material

contains between 5 and 20% sulphides (dominantly pyrite and arsenopyrite). Sulphides are more common in siliceous lode types.

Uranium assays range upto 1300 ppm with the highest values usually occurring on the periphery of strong tin mineralization. (Purvis, 1979). Barren granite gives results upto 40 ppm  $UO_3$ . The average uranium content of the calculated reserves is only 33 ppm. Torbenite is visible along fractures in the open cut.

#### 4.0 GEOPHYSICAL RESPONSE

Ground magnetics, EM 34, radiometric techniques and IP were used by CRAE to try and define the mineralized lode system at Royal George. (Purvis, 1981). Spectrometer measurements defined a broad diffuse zone with elevated values (Purvis, 1979) not related to the mineralized lodes. No magnetic or EM 34 response was recorded. IP data revealed a weak chargeability anomaly associated with disseminated sulphides. A small anomaly was detected in the northern extension of the lode system. (Purvis, 1981).

#### 5.0 DRILL DATA

A total of 18 diamond holes have been drilled into the Royal George deposit (Plans D/LJ 01/09, 10 and 11, Table 1). Holes were drilled by Ringwood (BG 80), BHP (3 holes), Cornwall Coal (13 holes) and CRAE (1 hole) (drill logs Appendix 1, cross-section plots Appendix 2). The diameter of drill core was generally too small to effectively determine a reliable tin grade with BHP - A size, Cornwall Coal - EX size and the only significant size RGC 1 at NQ. Many of the BHP and Cornwall Coal holes encountered core loss in the mineralized zones. Drilling at a larger size would probably upgrade the tin assays by reducing the "nugget effect" and improving core recoveries.

The initial 4 holes Ringwood DDH BG-80 and BHP 1, 2 and 3 were drilled to test for uranium. RGC 1 was drilled to test the deposit at depth. Grades were low in this deep hole which intersected the main zone 200m below the open cut.

In most drillholes two zones of significant tin mineralization were intersected with only one zone of economic grade with a true width of upto three metres.

#### 6.0 UNDERGROUND WORK

No. 1 and No. 2 levels were driven and mined out between 1911 and 1922. Cornwall coal deepened the inclined shaft and added No.3 and No. 4 levels (Plans D/LJ 01/12 and 13).

Channel samples from the floor of No. 2 level were taken by the Tasmanian Mines Department (Plan D/LJ 01/12). Seven further channel samples were collected by CRAE/Cornwall Coal - one on No. 2 level and 3 each on No. 3 and No. 4 levels (Appendix 1, Plans D/LJ 01/12 and 13).

The mine is currently flooded to the top of No.2 level.

#### 7.0 METALLURGY

A composite bulk sample of Royal George lode material was sent to the Mines Department laboratories in Launceston by Cornwall Coal (1971).

Results indicate that a recovery of 90% is attainable using a 150 mesh screen. Sulphides were removed by flotation after gravity separation.

Credits of 12 g/t Ag and 0.21% Zn were evident from the sample (TMD Report RG 12, Aug. 1971).

## 8.0 ORE RESERVES

Three ore reserve estimates of the Royal George deposit have been made (Table 2).

Mines Department (1967) - A Mines Department ore reserve was calculated by Noldart (1967) using Cornwall Coal, BHP and Ringwood drilling data and Mines Department channel assays on the floor of No. 2 level. A triangulation method was used to calculate the reserves below No. 2 level. The results gave 161 620t at 0.61% Sn (985 tonnes of tin).

CRAE (Purvis, 1979) - CRAE reassayed all available sample pulps and drillcore at Amdel and ALS with additional analysed for Cu, Pb, Zn, Ag, Au, W, U, Bi, Ta and F. Reassayed tin values were found to be 10 to 50% higher than original assays. In most cases the original Mines Department pulps were used.

Seven underground channel samples were taken from No. 2, 3 and 4 levels one of which was used in the ore reserve calculation. (Plan D/LJ 01/12 & 13).

A polygonal method of calculation was used with a maximum radius of 40m from each hole/sample, a maximum true width of 3m, specific gravity of 2.85 and a cut off of 0.25% Sn. A value of 590,560 tonnes at 0.41% Sn (2450 tonnes of tin) was computed. (Plan D/LJ 01/13).

CRAE (Purvis, 1981) - The reliability of the drillcore assays has been adversely affected by the small core diameter (EX and A) and the frequent losses of core in the mineralized zones. Because of the friable nature of strongly mineralized sections tin loss is probable from these zones. This ore reserve estimate has included a 25% grade increase for each sample to account for this tin loss. Other parameters used were a 0.2% Sn grade cut off, a minimum width of 3m and a specific gravity of 2.85 (determined by tests - Cornwall Coal). A reserve of 1,168,760 tonnes at 0.34% Sn

(3975 tonnes of tin) was outlined (Plan D/LJ 01/13).

Assay results from CCC3 and underground samples on No. 4 level have been omitted from this calculation.

#### 9.0 ADDITIONAL RESERVES

ROYAL GEORGE - A resource of 1.2 mt at 0.34% Sn has been calculated by CRAE. A possible increase of 0.5 mt at similar grade was considered in the fringe zone of the Royal George deposit (Purvis, 1981). Possible reserves therefore total 1.7 mt at 0.34% Sn (5780 tonnes of tin).

This estimate is considered a maximum because greisen alteration and tin grade decrease laterally and vertically from the centre of the open cut.

Tailings - Auger testing of the old mine tailings by Cornwall Coal determined a tonnage of 170,000 tonnes at a grade of 0.25% Sn. Grades were found to be uniformly distributed through the tailings material. Tin recovery was however low due to the fine grained nature of the cassiterite (generally less than -200#).

#### 10.0 CONCLUSIONS

Ore reserve calculations suggest that the Royal George tin deposit may contain upto 6000 tonnes of tin. Geological parameters indicate that this figure can be considered the maximum possible size. Preliminary metallurgical testwork suggests a recovery of 90% is possible with credits of Ag and Zn in the final concentrate (of the order of 12g/t and 0.2% respectively).

A total of 18 cored drillholes and numerous underground channel samples have been collected. The narrow diameter of drill core (EX and A) and frequent core loss in the friable mineralized zones shows the deposit to be poorly tested. However an ore reserve

estimate encompassing a 25% increase in individual sample grade gave a tonnage of 1.2 mt at 0.34% Sn (4080 tonnes of tin).

By itself the deposit is too small to warrant underground development by Billiton Australia. However it represents a significant reserve which may be combined with an additional deposit to form a viable resource.

Further development work should probably involve the redrilling of the deposit with NQ core size and bulk underground sampling for assay and metallurgical data.

Negotiations with Mr. A. Gee would be necessary to resolve the Mineral Rights of the downdip extension of the northern portion of the deposit.

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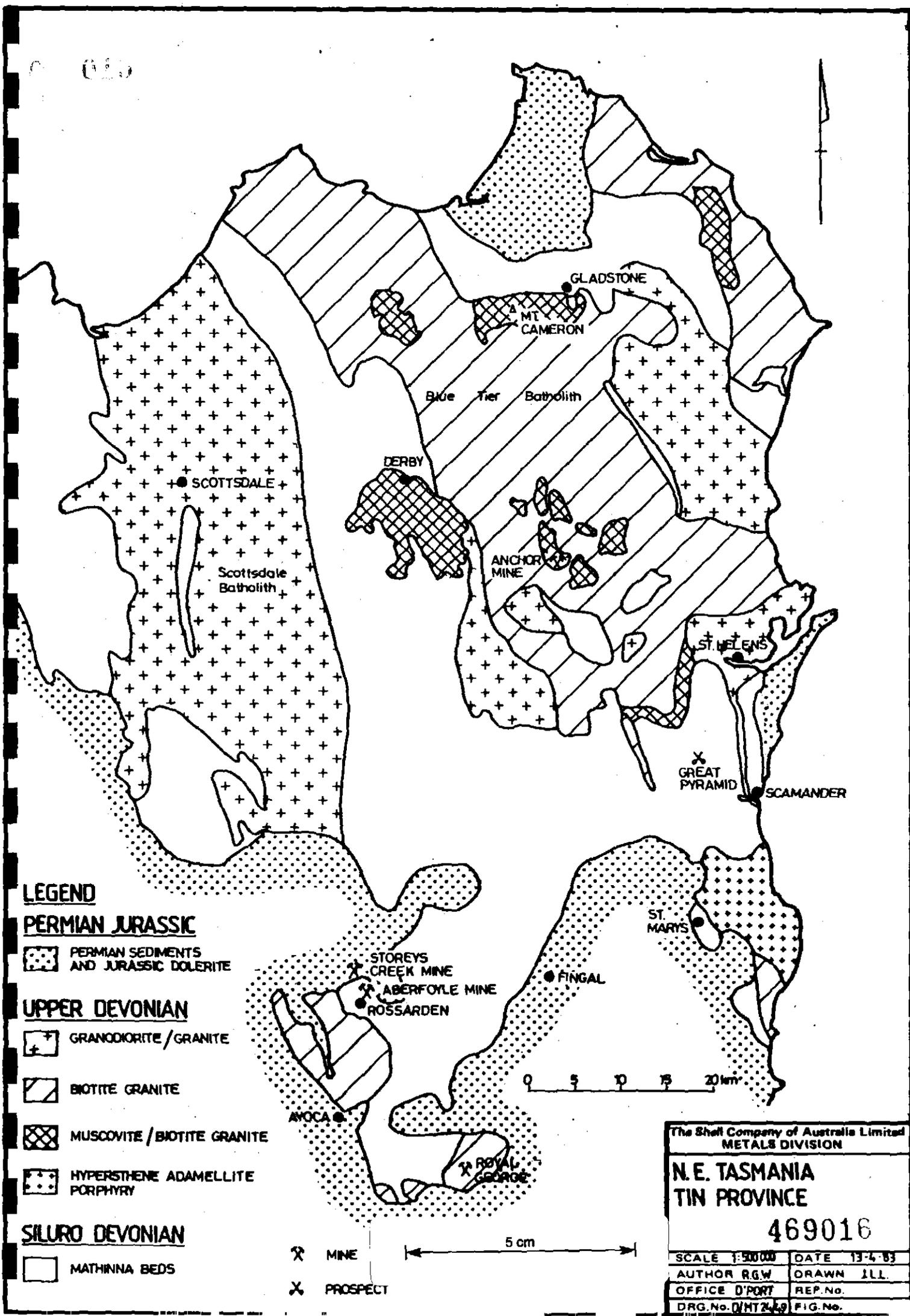
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TABLE 1

ROYAL GEORGE DRILLING DATA  
(Diamond cored holes)

Hole No.	Co-ords	Inclin.	Azimuth	RL	Total Depth	Company/Date
Ringwood DDH BG80	551'S 121'E	-43.5°	045°M	1026'	370'(112.8m)	Mr. A.Ringwood Ridgeway (1955)
BHP 1	440'S 104'W	-60°	045°M	1011'	614'2"(187.2m)	BHP (1957)
BHP 2	774'S 247'E	-60°	045°M	1004'	632'(192.6m)	BHP (1957)
BHP 3	602'S 65'E	-60°	045°M	1014'	510'5"(155.6m)	BHP (1957)
CCC 1	124'N 273'W	-60°	041°M	949'	144'(43.9m)	Cornwall Coal Co (1966)
CCC 2	114'S 014'W	HORZ	225°M	920'	88'(26.8m)	CCC (1966)
CCC 3	69'S 28'E	-48°	205°M	916'	99'(30.2m)	CCC (1966)
CCC 4	35'N 208'W	-60°	045°M	966'	125'(38.1m)	CCC (1966)
CCC 5	830'S 556'E	-61°	042.5°M	1016'	268'(81.7m)	CCC (1966)
CCC 6	720'S 367'E	-60.5°	036°M	1022'	310'(94.5m)	CCC (1966)
CCC 7	588'S 223'E	-60°	049°M	1030'	360'(109.7m)	CCC (1966)
CCC 8	444'S 63'E	-60°	044°M	1036'	360'(109.7m)	CCC (1966)
CCC 9	305'S 60'W	-59°	045°M	1020'	359'(109.4m)	CCC (1967)
CCC 10	236'S 130'W	-60°	045°M	1006'	350'(106.7m)	CCC (1967)
CCC 11	119'S 353'W	-60°	045°M	965'	443'(135.0m)	CCC (1967)
CCC 12	235'S 250'W	-60°	045°M	991'	510'(155.4m)	CCC (1967)
CCC 13	497'S 6'E	-60°	045°M	1020'	505'(153.9m)	CCC (1967)
RGC 1	522'S 275'W	-58°	045°M	988'	266.4m	CRAE (1979)

N.B. BHP drilling A core size.  
Cornwall Coal Co. drilling EX size.  
RGC 1 drilled NQ size.



**LEGEND**

**PERMIAN JURASSIC**

PERMIAN SEDIMENTS AND JURASSIC DOLERITE

**UPPER DEVONIAN**

GRANODIORITE / GRANITE

BIOTITE GRANITE

MUSCOVITE / BIOTITE GRANITE

HYPERSTHENE ADAMELLITE PORPHYRY

**SILURO DEVONIAN**

MATHINNA BEDS

MINE  
 PROSPECT

0 5 10 15 20 km

5 cm

The Shell Company of Australia Limited  
 METALS DIVISION

**N. E. TASMANIA  
 TIN PROVINCE**

**469016**

SCALE 1:50000	DATE 13-4-83
AUTHOR R.G.W.	DRAWN ILL.
OFFICE D'PORT	REP.No.
DRG.No. D/MT/2/89	FIG.No.

550 000 E      560 000 E      570 000 E      580 000 E      590 000 E

010

5400 000 N

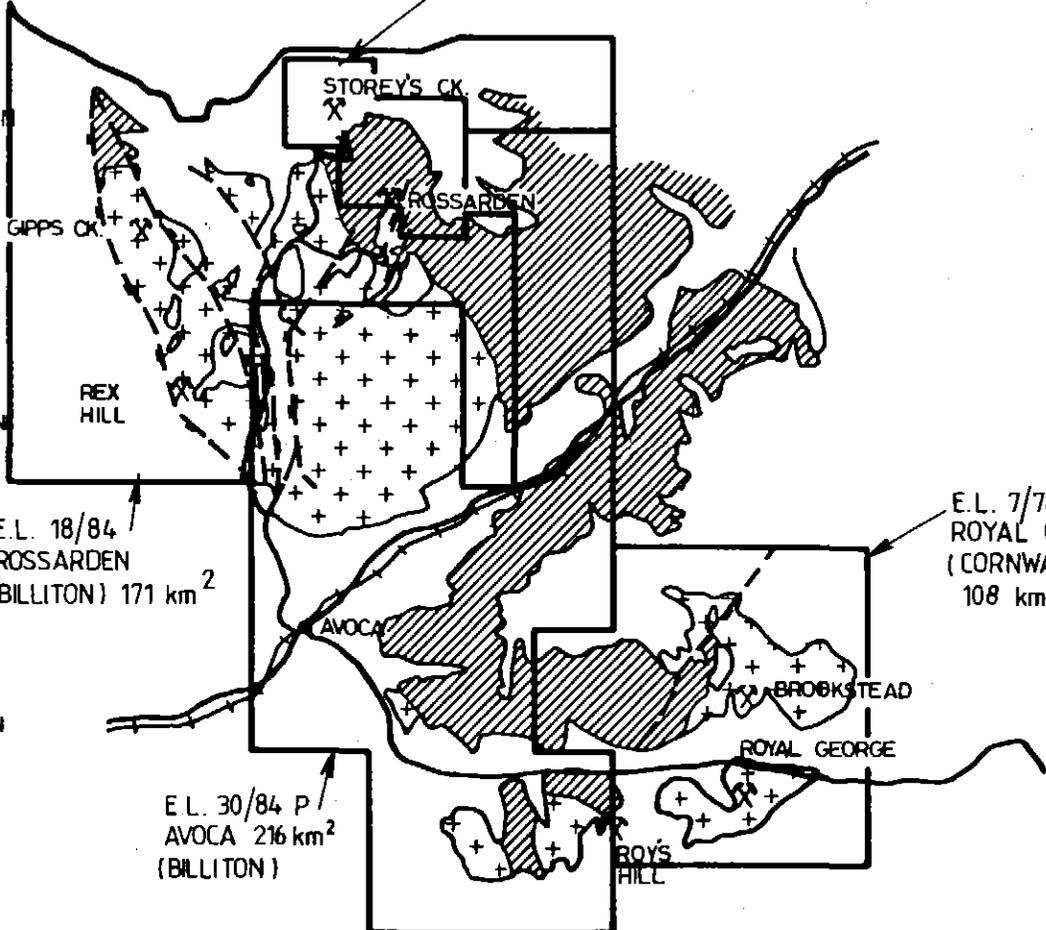
5390 000 N

380 000 N

370 000 N

360 000 N

E.L. 59/83 P  
WHEAL LUTWYCHE  
25 km<sup>2</sup> (STACPOOLE)



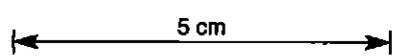
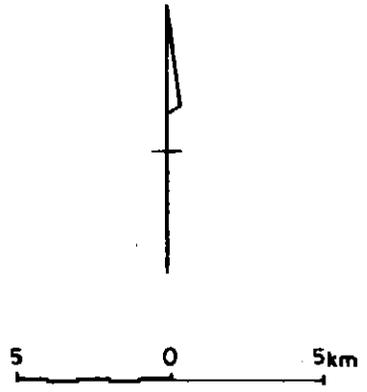
E.L. 18/84  
ROSSARDEN  
(BILLITON) 171 km<sup>2</sup>

E.L. 7/78  
ROYAL GEORGE  
(CORNWALL COAL / BILLITON)  
108 km<sup>2</sup>

E.L. 30/84 P  
AVOCA 216 km<sup>2</sup>  
(BILLITON)

**LEGEND**

-  COVER
-  MATHINNA BEDS
-  GRANITE

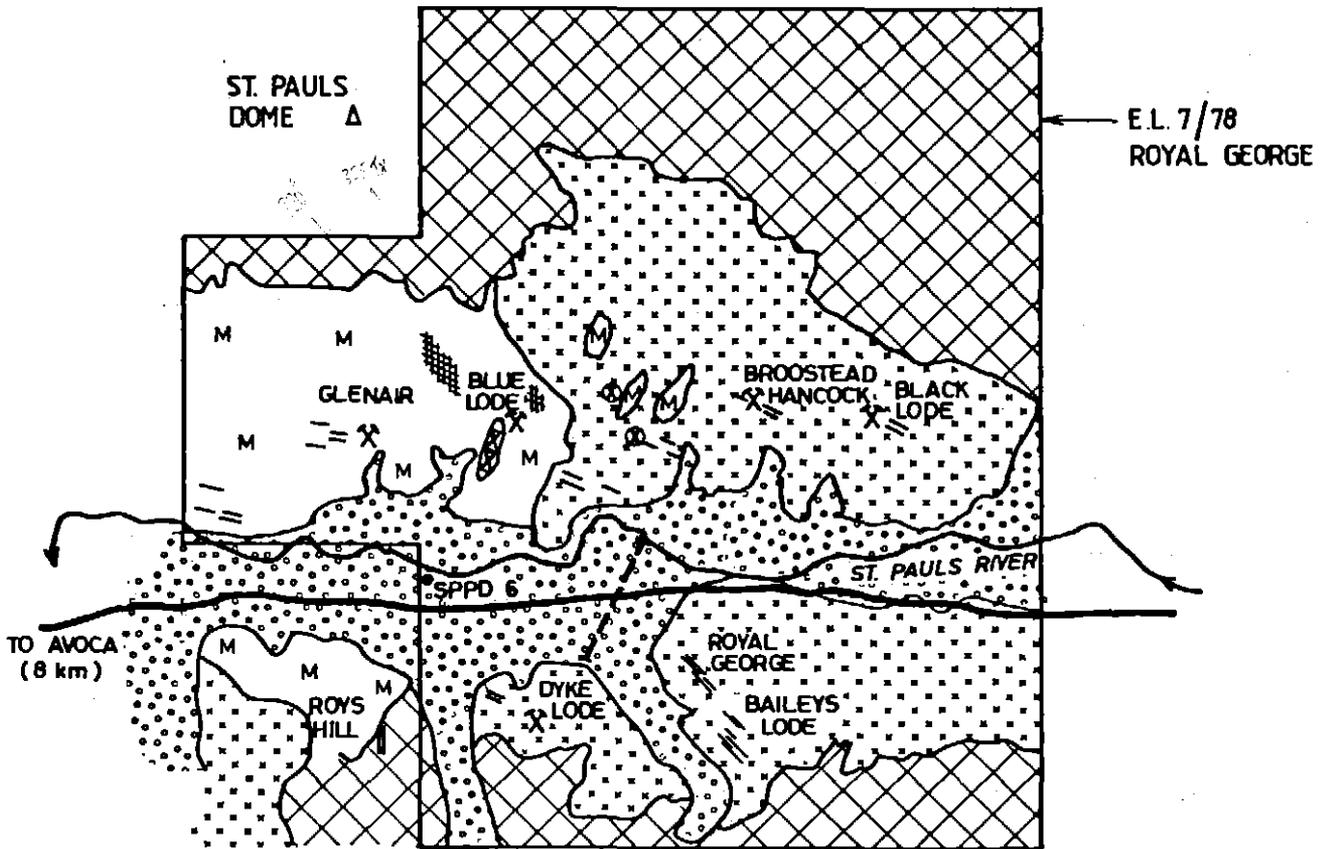


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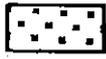
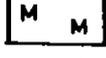
**BEN LOMOND GRANITE  
N.E. TASMANIA  
469017**

SCALE 1:250,000	DATE 14-7-65
AUTHOR P.A.R.	DRAWN J.L.L.
OFFICE D'PORT	REP. No.
DRG No 0/MT24/57 FIG No	

017



**LEGEND**

-  COLLUVIUM / ALLUVIUM / ELUVIUM
-  CARBONIFEROUS TO JURASSIC COVER
-  DEVONIAN GRANITE
-  MATHINNA BEDS
-  STRONG HORNFELISATION
-  PROSPECT
-  ANOMALOUS STREAM SEDIMENT SAMPLES (AMAX)
-  LOODES
-  ALLUVIAL PERCUSSION DRILLING (CRA)  
SPPD 6

5 cm



0 1 2 3 4 5 km

The Shell Company of Australia Limited METALS DIVISION	
E.L. 7/78 ROYAL GEORGE SKETCH GEOLOGY 469018	
SCALE 1:100 000	DATE 25-10-83
AUTHOR P.A.R.	DRAWN J.L.L.
OFFICE D'PORT	REP. No.
DRG No	FIG No 3

018

ROYAL GEORGE  
OPEN CUT

**LEGEND**

SPG 1 MINES DEPARTMENT  
DRILL HOLES

Costean

5 cm

TO ROYAL  
GEORGE

Costean

track

R. GEES PROPERTY

S.E. EXTENSION OF  
ROYAL GEORGE

M.N.

BAILEYS  
LODE

X SPG 2

X SPG 1

X SPG 3

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E.L. 7/78 ROYAL GEORGE / BAILEYS  
LODE

SKETCH DIAGRAM

469019

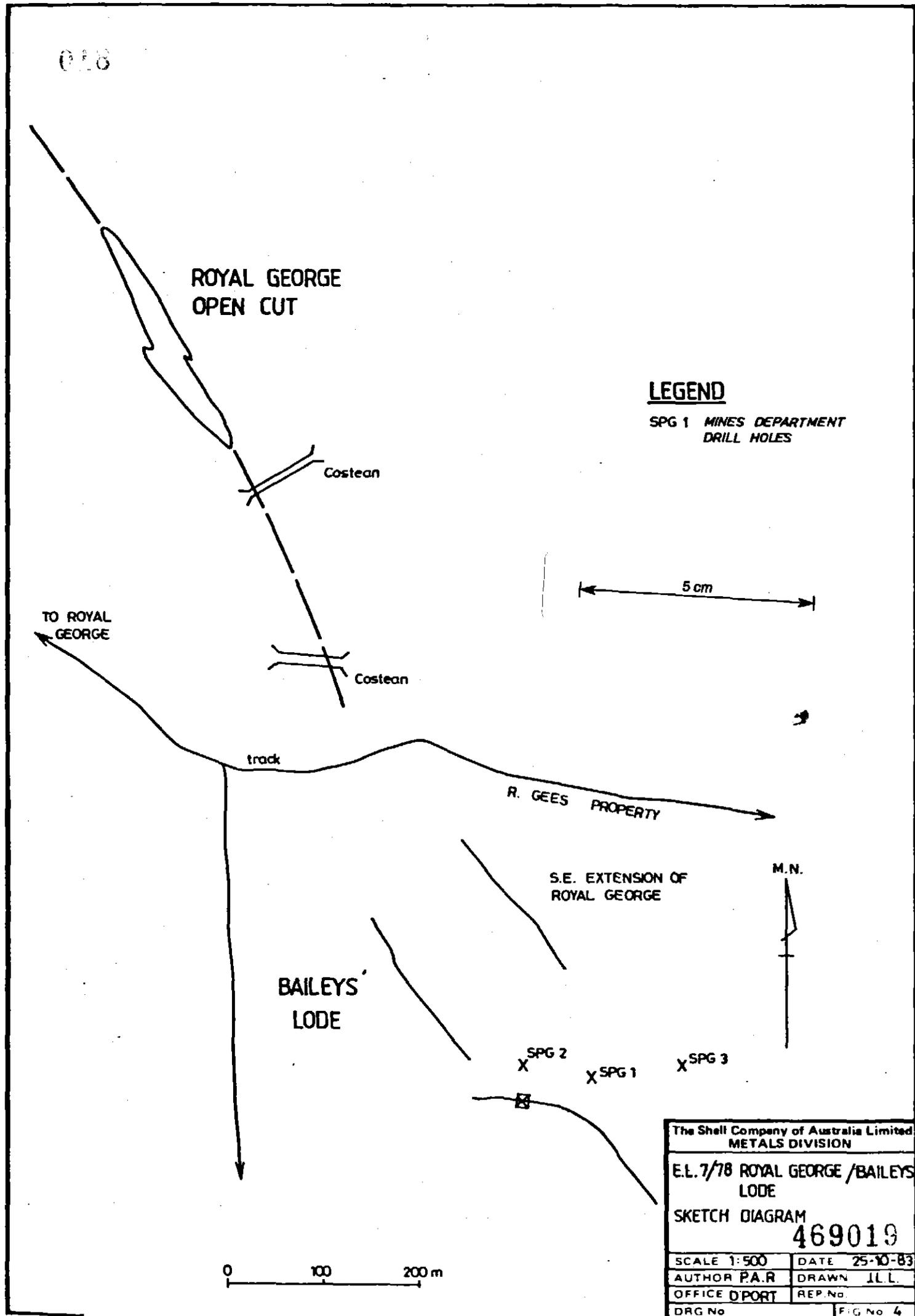
SCALE 1:500 DATE 25-10-83

AUTHOR P.A.R. DRAWN J.L.L.

OFFICE D'PORT REP.No.

DRG No FIG No 4

0 100 200 m



ORE RESERVE CALCULATIONS - ROYAL GEORGE

RESERVES CALCULATED BY	PARAMETERS USED	TONNES	% Sn	% Zn	gms/t Ag	% Cu	ORE BLOCKS USED	TONNES CONTAINED TIN
A.J.Noldart Mines Dept. 1967	Below No.2 level 13.5 cu ft/ton	161,620	0.61%	NC	NC	NC	A - H & J - S Mines Dept Plan, 2951.	985
G.Purvis, CRAE 1979.	Below No.2 level SG. 2.85 Minimum true width: 3m. Cut off grade: 0.25% Sn	590,560	0.41%	0.21%	12	0.07	C11, C12, C4, C10, No.3, C9, B1, C8, C13, BG - 80, C7, No.2. CRAE Plan No.TC172	2420
G.Purvis, CRAE 1980.	Below No.2.level SG. 2.85 Minimum true width: 3m. Cut off grade: 0.2% Sn	1,168,760	0.34%	NC	NC	NC	C11, C12, C4, C10, No.3, C9, B1, C8, C13, BG - 80, B3, C7 No.2., C6, B2, C5. CRAE Plan No. TV385.	3975

\*NC Not calculated

469020

019

469021

APPENDIX 1

Drill Core Sampling Results

Drill Log + Assays - RGC 1  
Assay Results - Cornwall Coal Holes CCC1-13  
- BHP Holes 1-3  
- Ringwood Hole BG-80

Channel Sample Results - Levels No.3 & No.4  
Cornwall Coal

021

APPENDIX I

DRILL LOG - RGC 1.







C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

469026

SHEET No. 4  
TENEMENT NAME ROYAL GEORGE No. 2  
PLAN - MAP REFERENCE 35  
DEPTH..... HOLE No. RGC 1  
CASING LEFT..... DPO No(s) 25821-25

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED.....  
RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED.....

DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by: <i>Andel + ALS</i> ) PPM						
										Sn	U	W	Zn	Cu	Ag	Pb
				204.2 - 204.6: Diffuse chloritic 'greisen' band centered on 50mm d/ solid sp 40%/LCA at 204.4. 5% py-sp.		795128 <sup>+</sup>	185	188	3	220	16	20	580	30	1	20
				210.2: 100mm fracture zone 40%/LCA qtz + py.		129 <sup>+</sup>	188	191	3	130	36	20	260	35	1	15
				211.6: 50mm 'greisen' band 45%/LCA 7% py > sp > cp - gn.		130 <sup>+</sup>	191	194	3	475	32	30	1300	55	1	25
				212.05: 80mm 'greisen' band 50%/LCA 7% py > sp > cp - arseno - gn.		131 <sup>+</sup>	194	197	3	110	20	10	180	40	1	15
				212.45: 80mm 'greisen' band 40%/LCA 7% py > arseno - sp > cp.		132 <sup>+</sup>	197	200	3	405	24	20	250	30	1	20
				212.65: 60mm 'greisen' band 45%/LCA 10% sp > py > cp.		795087	200	201	1	320	22		690	40	1	
				213.25: 50mm 'Greisen' band 35%/LCA 7-10% py > arseno - sp > cp.		88	201	202	1	200	16		770	55	2	
				214.7: 50mm 'Greisen' band 35%/LCA 10% py > sp > cp.		89	202	203	1	410	14		2300	75	2	
				215.3: 50mm 'Greisen' band 40%/LCA 5-7% py > arseno > sp.		90	203	204	1	210	22		210	42	1	
				216: 80mm 'greisen' band 40%/LCA 7% py > arseno > sp - cp.		91	204	205	1	290	20		2.8%	990	60	
				217.3: 5mm qtz vein ± arseno. 40%/LCA ± 40mm 'greisen' selvage - 10% py > arseno		92	205	206	1	240	24		310	42	1	
				219.45 - 226.50: 5-20%, average Grey, hard, highly altered siliceous zone comprising qtz - muscovite - sericite with minor tourmaline, chlorite and fluorite. Remnant qtz and feldspar show host rock is coarse grained granite, except between 224.15 - 225.15m		93	206	207	1	260	22		170	35	1	
				10-12%, disseminated sulphidic py > sp - cp > arseno. Rare gn + po.		94	207	208	1	320	22		220	60	1	
				226.50 - 229.45: Average 8-10% py > sp > arseno > cp. Rare magnetite associated with chlorite + gn.		95	208	209	1	280	22		140	40	<1	
						96	209	210	1	280	24		90	42	<1	
						97	210	211	1	280	28		150	42	1	
						98	211	212	1	350	26		500	55	1	
						99	212	213	1	820	24		1000	85	3	
						100	213	214	1	270	26		450	65	2	
						101	214	215	1	280	24		290	48	1	
						102	215	216	1	420	24		490	100	3	
						103	216	217	1	370	28		390	70	2	
						104	217	218	1	230	26		230	65	<1	
						105	218	219	1	230	26		400	65	<1	
45.229.45	10.00	NQ		MINERALISED ZONE		795059	219	220	1	300	30	30	590	150	3	
						60	220	221	1	530	26	20	840	580	8	
						61	221	222	1	1150	26	40	990	440	9	
						62	222	223	1	1050	24	35	1400	480	5	
						63	223	224	1	450	28	65	560	640	11	
						64	224	225	1	100	26	50	400	2500	80	
						65	225	226	1	120	28	30	290	2500	41	

469027

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME ROYAL GEORGE No. 5  
PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. RG 1  
RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s) 25825-21

DEPTH	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by <u>Andal ALS</u> )						
										Sn	U	W	Zn	Cu	Ag	Pb
				Which is fine grained granite. There are minor intercalations of coarse grained granite up to 15cm wide within the zone. Zone attitude 38°/LCA.		795066	226	227	1	750	24	55	2800	1100	15	
						67	227	228	1	540	22	20	2100	280	9	
						68	228	229	1	1000	22	20	2100	360	9	
						69	229	230	1	250	30	<10	530	290	6	
						70	230	231	1	150	28	20	170	65	<1	
						71	231	232	1	320	32	20	220	38	<1	
45	231.70	2.25	NQ	COARSE GRAINED PORPHYRITIC GRANITE As before. Large porphyritic euhedral feldspars up to 40mm. Altered, i minor sericite and muscovite.	3% py >> sp-cp. 229.85: 70mm 'greisen' band 40°/LCA 5% py >> sp-cp. Several 'greisen' bands < 20mm.	72	232	233	1	120	30	20	230	35	<1	
						73	233	234	1	150	26	20	85	55	<1	
						74	234	234.75	0.75	820	24		670	990	20	
						75	234.75	236	1.25	270	28		140	90	1	
						76	236	237	1	180	28		170	65	<1	
70	233.80	2.10	NQ	FINE GRAINED GRANITE Extremely hard, yellowish gray. Little biotite. Much tourmaline, some fluorite. Xyl lineation 45°/LCA. Altered - minor sericite and muscovite. Upper and lower hazy contacts.	3% py. Trace sp-arseno. Much in fractures 45°/LCA i tourmaline and thin 'greisen' selvages.	77	237	238.50	1.50	980	20		420	100	1	
						78	238.50	240	1.50	800	22		210	65	<1	
						79	240	241.50	1.50	640	26		150	55	<1	
						80	241.50	242.50	1	520	14		680	100	2	
						81	242.50	243.50	1	200	20		190	75	1	
						82	243.50	245	1.50	140	24		100	42	<1	
						83	245	246.50	1.50	380	22		160	45	<1	
80	247.95	13.90	NQ	ALTERED COARSE GRAINED GRANITE As before. Hard + siliceous. Altered, with sericitic feldspars and much patchy qtz-sericite-muscovite 'greisen' esp near fractures. Biotite, tourmaline, fluorite, chlorite common accessories. Basal contact 80°/LCA.	Numerous 'greisen' bands < 50mm, decreasing below 243.50m. 233.8-243.5: 3-5% py > sp. Trace cp-arseno. Trace cassiterite? below 238m. 243.5-247.95: 2% py > sp > cp-arseno 234.3-234.65: 'Greisen' band 55°/LCA. 7% py > sp-arseno > cp 234.8-234.95: Fault 60°/LCA (10cm core lost + water return lost). Brecciated qtz + feldspar in matrix of massive py, sericite + fluorite. Shearing extends to 236.50. Rock soft, clayey + sericitic. Badly broken.	84	246.50	247.75	1.25	240	30		110	35	<1	
						85	247.75	249	1.25	150	32		130	50	<1	
						86	249	250	1	150	38		48	32	<1	
						795133 <sup>+</sup>	250	253	3	190	24	<10	130	35	1	20
						134 <sup>+</sup>	253	256	3	130	28	10	240	65	1	20
						135 <sup>+</sup>	256	259	3	155	32	20	190	50	<1	15
						136 <sup>+</sup>	259	262	3	175	24	<10	270	90	1	15
						137 <sup>+</sup>	262	263.25	1.25	115	16	20	90	50	1	10
						138	263.25	264.70	1.45	1300	24	<10	420	35	1	55
						139	264.70	265.50	0.80	520	28	10	6800	110	3	25
						140 <sup>+</sup>	265.50	266.40	0.90	200	40	80	600	105	1	20



APPENDIX II

DRILLCORE SAMPLING RESULTS

CORNWALL COAL CO. HOLES CCC 1 - CCC 13

BHP HOLES 1 - 3

RINGWOOD HOLE BG - 80.







469033

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

SHEET No. 6

TENEMENT NAME ROYAL GEORGE No. 10

PLAN - MAP REFERENCE

CO-ORDINATES 35'N 208'W AZIMUTH 045° MAG DRILLERS CORNWALL COAL COMMENCED 6.6.66 DEPTH 125' HOLE No. CCC 4

RL COLLAR 966' INCLINATION 60° DRILL TYPE COMPLETED 27.6.66 CASING LEFT DPO No(s) 25807, 10, 11

DEPTH From To	APPROX CORE REMAINING AT CRANE SAMPLING	TAS MINES DEPT		Sample No.	From Fe	To Fe	Rec ft	ASSAY VALUES (Analyzed by AMDEL & ALS)								
		SAMPLE NO	ASSAY - Sn					PPM								
								Sn	U	W	Pb	Zn	Cu	Ag		
0	31	3		664473	0.16%	716999	0	31	4'6"	200	75	30	10	450	40	<1
						717937	31	36	1'3"	1700	620	20	100	4300	90	1
36	45	2				717000	36	45	2'6"	560	55	10	20	1100	40	<1
						664474	45	50	2'	1600	220	<10	110	3900	690	9
						662743	45	50	Sludge	2150	180	180	65	3900	550	5
				average - used in calculations:			45	50		1930	195			3900	605	7
50	60	3				717474	50	60	2'7"	540	55	<10	30	1200	50	<1
						662744	50	55	Sludge	6600	65	180	190	3600	400	10
				average - used in calculations:			50	60		2810	60			2100	180	4
60	70	2'6"				717475	60	70	1'3"	320	40	30	20	930	30	<1
70	79'6"	6				76	70	79'6"	7'	420	80	10	20	1100	30	<1
						664475	79'6"	81'6"	11"	3050	85	30	130	2400	730	9
81'6"	92	4				717477	81'6"	92	4'6"	1500	40	25	60	990	75	1
92	100	6				78	92	100	6'6"	360	36	25	35	820	40	1
100	110	8				717815	100	110	9'9"	1070	24			780	50	1
110	125	8				16	110	125	9'	500	28			460	70	1
									EDM							
				Best Intersections:			45	60	15'	2515	105			2700	320	5
							79'6"	92	12'6"	1750	45			1215	180	2

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

469034

TENEMENT NAME ROYAL GEORGE No. 5  
PLAN - MAP REFERENCE.....

CO-ORDINATES 830'S 556'E AZIMUTH 042.5° MAG DRILLERS CORNWALL COAL COMMENCED 6.7.66 DEPTH 268' HOLE No. CCC 5  
RL COLLAR 1016' INCLINATION 61° DRILL TYPE..... COMPLETED 31.8.66 CASING LEFT..... DPO No(s) 25808, 07, 10

DEPTH		APPROX CORE REMAINING AT CRAE SAMPLING	TAS MINES DEPT				ASSAY VALUES (Analysed by AMDEL TALS)									
From Ft	To Ft		SAMPLE NO	ASSAY- Sn	Sample No.	From Ft	To Ft	Rec Ft	Sn	U	W	Pb	Zn	Cu	Ag	
0	83	10			717480 <sup>+</sup>	0	83	19'3"	70	26	180	130	390	140	2	
3	94	8			81 <sup>+</sup>	83	94	8'6"	60	24	160	10	280	180	<1	
94	113	8			82 <sup>+</sup>	94	113	14	75	28	120	10	290	85	1	
13	123	7			83 <sup>+</sup>	113	123	9'6"	330	30	110	15	520	110	1	
23	140	6			84 <sup>+</sup>	123	140	10'6"	85	28	170	25	460	95	1	
			663543	Trace	717813	140	146'9"	3'3"	750	100		220	1100	230	4	
4'6"	184'6"	15			717485 <sup>+</sup>	146'9"	184'6"	32'3"	700	40	110	60	940	190	3	
4'6"	200'8"	7			86	184'6"	200'8"	16'2"	290	26	15	20	450	15	1	
			663544	0.17%	717917	200'8"	201'11"	1'3"	2150	110	10	1200	1900	210	21	
			45	Nil	18	201'11"	211'6"	9'7"	200	34	<10	30	390	28	<1	
			46	Trace	19	211'6"	212'8"	1'2"	620	32	15	70	480	320	3	
			47	Nil	20	212'8"	218	5'4"	180	34	20	20	380	32	<1	
			48	0.16%	21	218	219	1'	2150	36	10	40	400	290	4	
			49	Nil	22	219	220'3"	1'3"	120	90	15	30	370	35	<1	
			50	0.37%	23	220'3"	220'8"	5"	3900	32	10	35	150	380	2	
0'8"	229	5			717487	220'8"	229	5'4"	230	32	15	20	390	65	<1	
			663552	0.37%	717814	229	233'6"	4'6"	1500	24		450	270	290	3	
53'6"	240'6"	5			717488	233'6"	240'6"	7'	3900	20	20	30	280	25	<1	
45'6"	256'2"	5			89	240'6"	256'2"	14'11"	270	24	20	30	350	20	<1	
			663553	Nil	717924	256'2"	256'4"	2"	300	26	10	130	290	95	<1	
			54	0.05%	25	256'4"	257	8"	880	32	<10	380	1700	80	20	
			55	0.07%	26	257	257'10"	10"	1100	28	15	150	5200	140	5	
			56	0.05%	27	257'10"	259'5"	1'7"	800	44	30	110	2500	95	1	
			57	Nil	28	259'5"	260	7"	140	28	20	40	620	42	<1	
			58	0.05%	29	260	261'6"	1'6"	920	38	15	110	2600	230	3	
			59	Trace	30	261'6"	261'11"	5"	420	32	15	60	1500	90	<1	
			60	0.09%	31	261'11"	262'8"	9"	1450	36	20	55	3500	120	<1	
			61	Trace	32	262'8"	263'4"	8"	620	20	10	60	1600	48	<1	
			+ - Sampled with core grinder.	Nil	33	263'4"	265	1'8"	160	34	10	30	610	32	<1	
			63	0.10%	34	265	265'3"	3"	1400	24	20	55	1400	45	<1	
			64	Nil	35	265'3"	266'8"	1'5"	190	34	10	35	1000	42	<1	



469036

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME ROYAL GEORGE No. 0  
PLAN - MAP REFERENCE 0  
DEPTH 310' HOLE No. CCC 6  
COMPLETED 12.12.66 CASING LEFT DPO No(s) 25815, 10, 13

CO-ORDINATES 367'E, 720'S AZIMUTH 036° MAG DRILLERS CORNWALL COAL  
RL COLLAR 1022' INCLINATION 60.5° DRILL TYPE                      COMMENCED 2.9.66

DEPTH		APPROX CORE REMAINING AT CORE SAMPLING	TAS MINES DEPT	Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by <u>ANDEL - ALS</u> )									
om Ft	To Ft							PPM	Sn	U	W	Pb	Zn	Cu	Ag		
					0	166		NOT SAMPLED									
6	186'6"	10		716402*	166	186'6"	11'9"	175	32	140	20	330	230	1			
6'6"	195	9		03	186'6"	195	8'	340	20	20	40	560	40	<1			
5	200'7"	7	670286	0.22%	04	195	200'7"	6'8"	415	28	20	20	460	35	<1		
3"	202'4"					201'3"	202'4"									11"	2200*
						200'7"	201'3"										
					202'4"	202'7"											
2'7"	210	7		716405	202'7"	210	6'5"	325	16	20	30	270	30	<1			
0	223'6"	9	670287	0.28%	06	210	223'6"	8'3"	305	32	20	25	390	60	1		
3'9"	228					223'9"	228										
						223'6"	223'9"										
						231'6"	231'9"										
						240'5"	240'10"	1'7"	2800*								
						243	243'4"										
						245'1"	245'5"										
18	231'6"	9			716407	228	231'6"	7'9"	275	24	30	20	390	80	<1		
'9"	236					231'9"	236										
6	240'5"	10			716408	236	240'5"	8'11"	325	16	20	20	440	75	<1		
0'10"	243					240'10"	243										
3'4"	245'1"					243'4"	245'1"										
5'5"	246					245'5"	246										
6	256	9			716409	246	256	9'	100	16	20	10	145	15	<1		
6	256'5"	10			716410	256	256'5"	10'3"	400	16	20	75	1100	70	2		
6'10"	260'3"					256'10"	260'3"										
0'9"	263					260'9"	263										
2	267'9"					266'2"	267'9"										
8'5"	271					268'5"	271										
			* Mines Dept assay, Original sample pulps lost and all core taken in initial sampling.	670288	0.08%	717810	256'5"	256'10"	11"	1250	24		170	1400	550	17	
				670289	0.10%	717960	263	266'2"	3'2"	1600	24	<10	1600	2.7%	500	85	

+ - Taken with core grinder



C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

469038

SHEET No. 1

TENEMENT NAME ROYAL GEORGE No. 10

CO-ORDINATES 588'S, 223'E AZIMUTH 049° MAG DRILLERS CORNWALL COAL COMMENCED 23.9.66

PLAN - MAP REFERENCE ..... DEPTH 359'6" HOLE No. CCC 7

RL COLLAR 1030' INCLINATION 60° DRILL TYPE ..... COMPLETED 22.11.66

CASING LEFT ..... DPO No(s) 25808, 09, 10

DEPTH		APPROX CORE REMAINING AT CRAE SAMPLING		TAS MINES DEPT		Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by <u>ARDEL ALS</u> )								
From Ft	To Ft			SAMPLE NO	ASSAY-Sm					Sn	U	W	Pb	Zn	Cu	Ag		
0	21	11			+ - Sample taken by core grinder	717863 <sup>+</sup>	0	21	13'	24	40	110	15	110	65	1		
21	33	10				64 <sup>+</sup>	21	33	10'3"	36	32	180	10	140	120	1		
33	49	12				65 <sup>+</sup>	33	49	13'	24	40	150	5	130	100	1		
49	66	12				66 <sup>+</sup>	49	66	14'6"	26	38	170	10	140	170	1		
66	85	14				67 <sup>+</sup>	66	85	17'6"	28	26	100	10	160	220	1		
85	113	15				68 <sup>+</sup>	85	113	19'3"	60	26	130	45	160	330	1		
3	127	12				717805 <sup>+</sup>	113	127	12'6"	20	4	170	15	180	140	<1		
27	144	13				717870 <sup>+</sup>	127	144	13'6"	65	44	90	20	210	110	<1		
44	160	13				71 <sup>+</sup>	144	160	16'	50	16	80	10	290	175	<1		
60	170	10				72 <sup>+</sup>	160	170	10'	45	32	90	10	390	105	1		
70	188	9				73 <sup>+</sup>	170	188	18'	90	32	90	10	270	75	<1		
88	197	12				74 <sup>+</sup>	188	197	6'9"	65	100	110	10	580	220	<1		
97	218	15				75 <sup>+</sup>	197	218	18'	45	24	120	10	210	230	<1		
218	236	15				76 <sup>+</sup>	218	236	18'	190	38	110	80	470	200	2		
236	250	13				77 <sup>+</sup>	236	250	14'	80	44	100	20	175	240	1		
250	255	5				78	250	255	5'	28	40	20	10	130	10	<1		
255	260	5				79	255	260	5'	40	44	25	10	240	30	<1		
5'4"	271'8"	6				664476	0.14%	717940	260	266'4"	3'6"	1600	38	25	110	420	55	<1
								717880	266'4"	271'8"	5'4"	340	38	10	20	360	35	<1
						664477	0.18%	717941	271'8"	272'5"	9"	2100	48	40	230	2300	1900	38
2'5"	278'10"	6						717881	272'5"	278'10"	6'5"	390	24	15	20	530	50	1
						664478	0.17%	717942	278'10"	280'1"	1'3"	1950	34	15	240	4400	660	14
0'1"	282'6"	3						717882	280'1"	282'6"	2'5"	340	24	35	30	480	35	1
						664479	0.20%	717943	282'6"	284	1'6"	2350	34	35	730	4500	520	24
3'4	286'9"	3						717883	284	286'9"	2'9"	320	22	15	25	480	35	1
						664481	0.18%	717945	286'9"	291	4'3"	2150	20	25	190	2800	460	8
						82	0.48%	46	291	294	3	6100	22	20	210	5000	640	13
						83	Trace	47	294	297	3	3800	22	20	150	2100	510	9
						84	0.22%	48	297	300	3	3050	24	25	180	2000	1100	23
						85	0.41%	49	300	303	3	4600	22	35	220	4000	950	29
						86	0.31%	50	303	306	3	3650	24	20	190	8900	650	12



469040

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

SHEET No. 1

TENEMENT NAME ROYAL GEORGE No. 60

PLAN - MAP REFERENCE 60

CO-ORDINATES 1145 65E AZIMUTH 044° MAG DRILLERS CORNWALL COAL COMMENCED 14.12.66 DEPTH 360' HOLE No. CCC 8

RL COLLAR 1036 INCLINATION 60° DRILL TYPE COMPLETED 20.3.67 CASING LEFT 4' 8 1/2" DPO No(s) 25810, 13, 14

DEPTH		APPROX CORE REMAINING AT CRAE SAMPLING	TAS MINES DEPT	SAMPLE NO.	ASSAY - Sn	Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by AMDELA PLS) PPM								
From Ft	To Ft									Sn	U	W	Pb	Zn	Cu	Ag	Au	Bi
							0	200		NOT SAMPLED								
200	217	10				717788	200	217	9'3"	25	<4	90	20	390	50	<1		
217	231'6"	12				89	217	231'6"	13'	20	<4	80	20	560	45	<1		
231'6"	237	5'6"				90	231'6"	237	4'9"	135	12	10	50	200	10	1		
237	247'6"	6				91	237	247'6"	8'	40	4	10	30	230	10	<1		
247'6"	253	5				92	247'6"	253	5'6"	15	<4	10	15	230	5	<1		
253	260	5'6"				93	253	260	6'	115	16	20	20	290	15	1		
260	266	5				94	260	266	5'	105	4	10	15	310	10	<1		
266	272'6"	5				95	266	272'6"	6'6"	30	12	20	20	290	10	<1		
						670875		272'6"	274'8"	1'11"	6300	30	10	2700	3.2%	1300	48	.015 40
						670876		274'8"	276'1"	1'5"	350	26	<10	1500	2400	130	12	
276'1"	285	3'6"				717796	276'1"	285	4'8"	365	16	20	45	600	150	3		
						670877		285	288	3'	3700	24	<10	220	3100	670	20	
						78		288	291'3"	3'3"	4900	26	10	220	2600	470	14	
291'3"	297	5				717797	291'3"	297	5'9"	275	12	10	20	280	20	<1		
						670879		297	298	1'	2750	18	20	280	1.2%	570	14	
298	302'6"	5				717798	298	302'6"	4'6"	120	12	20	20	310	20	<1		
302'6"	307'9"	5				99	302'6"	307'9"	5'3"	380	12	20	30	580	30	<1		
						670880		307'9"	314	6'3"	7000	24	20	100	3400	680	9	.01 14
						81		314	320'3"	5'7"	6500	30	65	90	1400	2400	32	.01 55
						82		320'3"	326'6"	6'3"	3800	32	75	70	1800	2200	27	
326'6"	329'4"	2'6"				717800	326'6"	329'4"	2'10"	95	20	10	15	260	10	<1		
						670883		329'4"	333	3'8"	1750	30	15	190	3400	450	18	
333	341	7				717801	333	341	8'	140	24	20	30	240	15	1		
						670884		341	343'10"	2'10"	9600	28	25	80	1500	660	12	.015 6
343'10"	348	4				717802	343'10"	348	4'2"	90	20	10	20	185	15	<1		
						670885		348	348'9"	9"	1.6%	22	15	50	1600	610	8	<.005 4
348'9"	354	5				717803	348'9"	354	5'3"	20	16	20	15	60	5	<1		
354	360	5'6"				04	354	360	6'	115	16	20	30	180	20	<1		
									EOM									
									Best intersections:									
								272'6"	291'3"	18'9"	2350	21			5110	420	13	
								307'9"	348'9"	41'	3800	26			1520	910		

469041

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME...ROYAL GEORGE No. 3  
PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... 045° MAG..... DRILLERS...CORNWALL COAL..... COMMENCED...14.11.66..... DEPTH..... 359'..... HOLE No. CCC 9  
RL COLLAR..... 1020'..... INCLINATION..... 59°..... DRILL TYPE..... COMPLETED...23.1.67..... CASING LEFT 4' 12" / 5' 1 1/2" DPO No(s) 25807, 08, 10

DEPTH om R	To R	APPROX CORE REMAINING AT CRATE SAMPLING	TAS MINES DEPT		Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by AMDEL.....)									
			V SAMPLE NO?	I. ASSAYS - Sn					PPM	Sn	U	W	Pb	Zn	Cu	Ag	Au	Bi
16		10	+ - Taken with core grinder		717490 <sup>+</sup>	0	16	11'6"	36	26	150	10	200	210	1			
6	25	9			91 <sup>+</sup>	16	25	7'	44	32	150	10	220	170	1			
5	34	9			92 <sup>+</sup>	25	34	8'	34	36	75	5	190	100	1			
34	64	11			93 <sup>+</sup>	34	64	15'6"	30	34	140	10	210	80	1			
4	93	10			94 <sup>+</sup>	64	93	10'	24	28	160	15	210	70	1			
93	109	14			95 <sup>+</sup>	93	109	15'	26	28	110	5	160	48	1			
09	131	15			96 <sup>+</sup>	109	131	17'	14	26	110	5	150	60	1			
31	151	9			97 <sup>+</sup>	131	151	11'1"	28	30	120	5	230	70	1			
51	161	10			98 <sup>+</sup>	151	161	9'6"	26	34	150	35	340	75	1			
61	176	13			717861 <sup>+</sup>	161	176	13'3"	28	32	300	10	400	250	2			
76	200	12			62 <sup>+</sup>	176	200	9'4"	38	36	150	10	300	70	1			
209	209	6		ALS-check assay	717499	200	209	8'6"	28	28	25	60	230	5	<1			
209	218	6		Sn ppm	717500	209	218	6'	26	26	10	20	170	5	<1			
					670741		0.17%	717962	218	220'9"	1'4"	1700	30	10	520	7400	160	17
20'9"	231	6			717851	220'9"	231	6'8"	55	26	10	20	260	10	<1			
231	242'8"	9			52	231	242'8"	8'2"	34	28	15	10	150	2	<1			
					670742		0.88%	717963	242'8"	243'4"	0'8"	8700	24	15	350	1600	760	25
43'4"	246'7"	5			717853	243'4"	246'7"	3'3"	42	22	<10	20	360	2	<1			
					670743		0.88%	717964	246'7"	247'3"	0'8"	9100	28	15	140	1600	1600	40
					190378	247'3"	255'4"	8'1"	40			10	330	5	<1			
					670744		0.50%	717965	255'4"	256'1"	0'9"	5100	50	15	90	5100	190	6
56'1"	261	6			717854	256'1"	261	4'11"	40	26	<10	10	550	8	<1			
					670745		0.16%	717966	261	261'10"	0'9"	1350	26	15	380	2500	250	40
161'10"	262'4"	3				261'10"	262'4"	6"										
263	265				717855	263	265	8"	680	28	15	70	2100	110	2			
166'3"	269						266'3"	269	1'7"									
					3500	670746	0.29%	717967	262'4"	263'	7"	3400	28	15	50	1.1%	680	10
					3800	47	0.35%	68	265	266'3"	5"	4000	24	10	40	3000	470	7
					7700	48	0.79%	69	269	274	3'8"	7500	30	<10	360	2900	4100	85 <0.05%
						190377		5'3"	195			12	400	12	<1			
					9500	670749	1.02%	717970	280'5"	282'5"	1'8"	9400	24	<10	180	2700	1400	33 <0.005%

469042

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

SHEET No. 2

TENEMENT NAME... ROYAL GEORGE No. 2

PLAN - MAP REFERENCE.....

CO-ORDINATES 305'S 60'W AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH 359' HOLE No. CCC 9

RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s) 25807, 10

DEPTH		APPRX CORE REMAINING AT CORE SAMPLING	TAS MINES DEPT		SAMPLE NO	ASSAY - Sn	Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by AMPAL) PPM									
From Ft	To Ft		ALS - Check Assay Sn ppm	Ca Fe (Amel)							Sn	U	W	Pb	Zn	Cu	Ag	Au	Bi	
82'5"	283	6						282'5"	283											
83'5"	284'9"						717856	283'5"	284'9"	4'8"	2000	30	<10	80	2400	340	8			
288	291'10"							288'	291'10"											
293	294							293'	294											
			1300		670750	0.12%	717971	283	283'5"	3"	1500	26	<10	45	1900	200	2			
			5400		51	0.42%	72	284'9"	288	2'1"	5200	24	15	130	4800	980	20			
			3100		52	0.32%	73	291'10"	293	9"	2950	34	<10	50	2700	140	3			
			6500		53	0.71%	74	294	296'3"	2'3"	6700	32	10	100	3200	590	16	<.005	38	
96'3"	301'1"	5					717857	296'3"	301'1"	4'10"	150	34	10	35	1400	25	<1			
			9100		670754	0.88%	717975	301'1"	303	1'11"	9000	130	25	150	5300	1800	25	.045	50	
			7800	1.38%	55	0.71%	76	303	307	3'6"	7800	30	25	30	950	95	1	.025	16	
			6200	1.34%	56	0.66%	77	307	310	3'	6400	38	<10	110	7800	850	20	.020	22	
			1.02%	3.10%	57	1.00%	78	310	315	5'	1.08%	16	<10	340	8200	3600	85	.025	80	
			2100		58	0.23%	79	315	315'9"	8"	2150	44	<10	200	7200	760	25			
315'9"	317'10"	2					717858	315'9"	317'10"	1'11"	190	22	<10	40	480	35	1			
			7500		670759	0.71%	717980	317'10"	320'1"	2'3"	7500	40	<10	65	4900	1050	16	.065	30	
			590		60	0.10%	81	320'1"	323'2"	3'1"	660	38	10	90	2800	90	1			
			4400		61	0.48%	82	323'2"	325'8"	2'6"	4700	38	<10	170	6300	2200	27			
			795		62	0.10%	83	325'8"	328'7"	2'11"	840	20	20	75	320	90	1			
			5500		63	0.53%	84	328'7"	329'11"	1'4"	5600	50	10	60	4700	120	2			
							190376	329'11"	339'	9'1"	330				28	440	25	<1		
			1.20%		670764	1.20%	717985	339	342'4"	2'4"	1.28%	840	10	160	4800	400	9	.155	<.2	
342'4"	346	4					717859	342'4"	346	3'8"	170	60	10	35	440	30	<1			
							190375	346	354	8'	300				8	470	18	<1		
354	359	4					717860	354	359	4'6"	160	12	10	20	440	15	<1			
										EOH										
								Best intersections:	262'4"	342'4"	80'	4080			3000	840	17			
								including:	269'	320'1"	57'1"	4860			3290	1135	24			

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

469043

SHEET No. 1

TENEMENT NAME... ROYAL GEORGE No. 2

PLAN - MAP REFERENCE.....

CO-ORDINATES... 236° 130' W AZIMUTH... 045° MAG DRILLERS... CORNWALL COAL COMMENCED... 25.1.67 DEPTH... 350' HOLE No. CCC 10

RL COLLAR... 1006' INCLINATION... 60° DRILL TYPE..... COMPLETED... 10.3.67 CASING LEFT..... DPO No(s) 25810, 13, 14

DEPTH		APPROX CORE REMAINING AT	TAS MINES DEPT				ASSAY VALUES (Analysed by AMDEL & ALS)																
From Ft	To Ft	CRANE SAMPLING	CaF <sub>2</sub> (Amde)	SAMPLE NO	ASSAY - Sn	Sample No.	From Ft	To Ft	Rec Ft	Sn	U	W	Pb	Zn	Cu	Ag	Au	Bi					
							0	200		NOT SAMPLED													
200	211	10				717773*	200	211	10'9"	90	12	110	240	340	60	<1							
211	222	10				74*	211	222	11'	45	32	120	20	380	70	<1							
222	235	12				75*	222	235	11'	165	20	140	30	560	90	<1							
235	242	6				717776	235	242	5'3"	250	16	10	40	240	20	1							
242	249'4"	6				77	242	249'4"	7'4"	120	16	20	20	270	10	<1							
			0.88%	670886	0.39%	718000	249'4"	250'6"	1'	4100	28	25	170	3700	1000	25							
50'6"	254'3"	3				717778	250'6"	254'3"	3'9"	60	16	20	20	310	5	<1							
			0.78%	670887	0.97%	717601	254'3"	255'4"	1'1"	1082	26	25	50	1000	1400	30	0.03	34					
			0.46%	88	Trace	02	255'4"	265'6"	9'11"	370	26	10	15	500	42	<1	0.01	<4					
				89	0.58%	03	265'6"	268	1'6"	5600	50	45	80	510	280	7							
268	276	6				717779	268	276	5'6"	340	32	20	30	580	25	<1							
276	281	3'4"		670890	0.63%	795008*	276	281	4'	4700	32			1100	600	10							
281	286'6"	2'9"		91	0.36%	09*	281	286'6"	3'3"	3800	36			1800	480	12							
				92	0.32%	717604	286'6"	290'1"	3'1"	3150	26	10	210	3900	590	14							
290'1"	298	7				717780	290'1"	298	7'5"	220	16	20	25	940	30	<1							
				670893	0.60%	717605	298	300'4"	2'4"	5700	26	20	65	2700	1700	25							
300'4"	304	3				717781	300'4"	304	3'8"	100	20	20	30	840	15	<1							
				670894	0.19%	717606	304	307'7"	2'7"	1800	75	<10	100	4100	560	8							
307'7"	311'6"	3				717782	307'7"	311'6"	3'11"	45	444	50	85	1600	65	5							
				670895	0.06%	717607	311'6"	316'6"	4'	810	640	20	65	1500	200	3							
316'6"	322'2"	4				717783	316'6"	322'2"	4'6"	95	276	30	50	760	50	2							
				670896	0.19%	717608	322'2"	326'10"	4'8"	2000	40	10	90	2300	1400	22							
326'10"	329'4"	2'6"				717784	326'10"	329'4"	2'6"	230	12	20	30	290	10	<1							
				670897	0.32%	717609	329'4"	332'2"	2'10"	3200	44	<10	150	2400	770	16							
332'2"	339	7				717785	332'2"	339	6'10"	265	24	20	70	980	35	1							
339	346'7"	6				86	339	346'7"	7'7"	190	12	20	25	640	35	<1							
				670898	0.05%	717610	346'7"	348'4"	1'9"	380	1300	20	450	6300	570	15							
348'4"	350	1'6"				717787	348'4"	350	1'8"	<5	8	40	30	330	15	<1							
									EDH														
							276	290'1"	14'1"	3950	32			2090	550	12							
							322'2"	332'2"	10'	460	24												

+ - Sample taken with core grinder

Best intersections:



469045

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

SHEET No. 2

TENEMENT NAME ROYAL GEORGE No. 10

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED.....

DEPTH 443' HOLE No. CCC 11

RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED.....

CASING LEFT..... DPO No(s) 25810, 13

DEPTH		APPROX CORE REMAINING AT GRAVE SAMPLING	TAS MINES DEPT		Sample No.	From ft	To ft	Rec ft	ASSAY VALUES (Analysed by AMPDEL ALS)						
From ft	To ft		SAMPLE NO	ASSAY - Sn					PPM	Sn	U	W	Pb	Zn	Cu
			680354	0.08%	717675	402'9"	404'6"	1'9"	1250	24	15	15	3100	390	<1
4'6"	412	5			716430	404'6"	412	7'6"	430	4	20	20	600	75	1
2	415'6"	3			717698	412	415'6"	3'6"	220	4	10	20	480	25	<1
			680355	0.15%	717676	415'6"	417	1'6"	2100	18	30	20	700	720	6
7	421'6"	3			717699	417	421'6"	4'6"	60	8	10	60	440	30	1
			680356	0.07%	717677	421'6"	423'6"	2'	800	26	20	65	1400	200	6
			57	0.38%	717678	423'6"	425'6"	2'	4600	20	110	130	7900	180	6
5'6"	428'9"	2'6"			717700	425'6"	428'9"	3'3"	60	4	20	20	185	20	<1
						428'9"	443		NOT SAMPLED						
									EOL						
						Best intersection:			367'3"	384'9"	17'6"	3300	27		850 370 3

469046 C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME ROYAL GEORGE No. 1  
PLAN - MAP REFERENCE

CO-ORDINATES 235'S 250'W AZIMUTH 045° MAG DRILLERS CORNWALL COAL COMMENCED 19.6.67 DEPTH 510' HOLE No. CCC 12  
RL COLLAR 991' INCLINATION 60° DRILL TYPE COMPLETED 26.7.67 CASING LEFT 7' EX DPO No(s) 25810, 13

DEPTH		APPROX CORE REMAINING AT CRAE SAMPLING	TAS MINES DEPT V SAMPLE NO	ASSAY- Sn	Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by AMDEL + ALS) PPM									
From Ft	To Ft								Sn	U	W	Pb	Zn	Cu	Ag			
56	61	3			717751	0	56		NOT SAMPLED									
						61	330		NOT SAMPLED									
330	344	10			717752*	330	344	9'6"	275	28	120	30	520	110	2			
			671702	Trace	717611	344	349	4'6"	150	26	30	110	380	22	<1			
			03	Trace	12	349	354	5'	200	46	<10	120	580	35	1			
			04	Trace	13	354	359	5'	350	32	10	240	930	38	<1			
			05	0.10%	14	359	362'6"	3'6"	1500	60	15	150	2900	90	3			
			06	Trace	15	362'6"	367'6"	4'6"	680	70	<10	100	1200	55	<1			
			07	Trace	16	367'6"	371'6"	4'	560	32	<10	95	1600	40	<1			
			08	Trace	17	371'6"	375'6"	5'	110	40	<10	75	710	15	<1			
			09	Trace	18	375'6"	380'3"	4'9"	770	70	<10	170	500	65	<1			
			10	Trace	19	380'3"	384'6"	4'3"	350	55	10	120	960	50	<1			
			11	0.18%	20	384'6"	388'6"	4'	2350	28	20	140	410	30	<1			
			12	Trace	21	388'6"	392'6"	4'	560	34	<10	100	780	70	<1			
			13	Trace	22	392'6"	396'3"	3'9"	300	30	25	95	800	70	<1			
			14	Trace	23	396'3"	399	2'9"	100	36	<10	70	340	30	<1			
			15	0.18%	24	399	403	4'	2150	24	30	110	2500	1400	10			
			16	0.70%	25	403	407	4'	7400	36	20	85	1100	390	3			
			17	Trace	26	407	412	5'	860	32	10	75	640	85	<1			
			18	0.10%	27	412	416	4'	2050	28	35	110	1500	890	11			
			19	Trace	28	416	420	4'	550	28	25	45	810	230	1			
420	429'6"	8			717753*	420	429'6"	9'6"	230	20	230	20	960	170	1			
			671720	0.10%	717629	429'6"	432'6"	3'	1300	38	15	50	1400	290	3			
			21	Trace	30	432'6"	435'6"	3'	1300	30	20	45	750	170	1			
			22	0.28%	31	435'6"	438'6"	3'	3350	38	15	180	2900	600	26			
			23	0.10%	32	438'6"	441'6"	3'	1800	22	10	70	910	290	5			
			24	0.10%	33	441'6"	444	2'6"	2000	22	30	65	1300	340	6			
444	456	10			717754*	444	456	12'	60	16	130	15	580	70	<1			
			671725	Trace	717634	456	458'3"	2'3"	300	32	<10	60	780	55	1			
458'3"	461'6"	3		+ Sample taken with core grinder	717755*	458'3"	461'6"	3'3"	30	24	140	15	270	80	<1			



469048

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME... ROYAL GEORGE No. 5  
PLAN - MAP REFERENCE..... 52

CO-ORDINATES... 497'S., 6'E. AZIMUTH... 045° MAG. DRILLERS... CORNWALL COAL COMMENCED... 11:9:67 DEPTH... 505' HOLE No. CCC 13  
RL COLLAR... 1020' INCLINATION... 60° DRILL TYPE..... COMPLETED... 24:10:67 CASING LEFT... 10' EX DPO No(s) 25810, 13

DEPTH		APPROX CORE REMAINING AT CRAE SAMPLING	TAS MINES DEPT		Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by AMDEL - ALS) PPM						
From Ft	To Ft		V SAMPLE NO	I. ASSAY - Sn					Sn	U	W	Pb	Zn	Cu	Ag
			+ - Sample taken with core grinder			0	304		NOT SAMPLED						
304	314	9			717759*	304	314	10'	80	276	110	20	720	85	<1
314	324	9			60*	314	324	10'	10	20	120	10	195	60	<1
324	334'6"	9			61*	324	334'6"	10'6"	40	20	140	20	250	70	<1
334'6"	344	10			62*	334'6"	344	9'6"	15	24	120	20	125	40	<1
344	352	8			63*	344	352	8'	15	16	90	15	150	50	<1
352	360	8			64*	352	360	8'	10	24	110	20	140	45	<1
360	365	5			65*	360	365	5'	50	24	20	20	60	5	<1
365	370	5			66	365	370	5'	35	36	20	50	50	5	1
370	376	6			67	370	376	6'	20	56	20	10	40	5	<1
376	383'6"	7			68	376	383'6"	7'6"	30	12	20	10	50	5	<1
				ALS - check Assay - Sn (ppm)											
				478	672193			4'6"	500	36	10	270	1200	100	6
				150	94			5'	150	32	<10	95	340	30	1
				2900	95			2'	3150	24	15	360	1200	210	10
				1100	96			5'	1150	20	30	110	710	540	7
				505	97			4'6"	640	24	15	35	830	80	1
				385	98			4'6"	430	20	15	45	560	42	1
					99			4'3"	3450	22	20	160	1200	410	4
					672200			2'6"	7400	24	50	200	1400	1300	16
					01			2'3"	620	32	25	90	720	80	2
					02			3'	700	24	15	470	1300	80	1
					03			6'3"	1150	24	35	110	750	1200	17
					04			7'3"	330	24	20	20	330	50	<1
					05			1'6"	900	24	15	45	890	160	2
					06			3'3"	3850	20	20	180	1800	840	20
'39'3"	444	8"		Ca F <sub>2</sub> (Amel)	671769			1'	1680	4	90	170	540	880	13
					672207 (sludge)			Sludge	6000	30	740	110	950	910	9
				Average used in calculations:					8270	25			860	900	10
				0.30%	672208			5'3"	5250	24	70	160	1700	2500	45
				0.60%	09			4'3"	2800	24	35	80	2300	400	8
					10			2'	1600	26	15	100	1100	200	10

469049

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME ROYAL GEORGE No. 13  
PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH 505' HOLE No. CCC 13  
RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s) 25814, 16

DEPTH		APPROX CORE REMAINING AT CRAG SAMPLING	TAS. MINES DEPT		Sample No.	From Ft	To Ft	Rec Ft	ASSAY VALUES (Analysed by ALS-ANZ)						
From Ft	To Ft		SAMPLE NO	ASSAY - Sn					PPM						
									Sn	U	W	Pb	Zn	Cu	Ag
			672211	<0.05%	717654	455'6"	457'3"	1'9"	730	26	15	100	1300	180	6
			12	<0.05%	55	457'3"	462'3"	5'	490	28	15	25	560	65	<1
462'3"	468	5'7"			795006	462'3"	468	5'9"	240	20			170	20	<1
468	474	6'			07	468	474	6'	960	28			580	330	3
474	490	12'			717771*	474	490	12'3"	270	28	140	25	700	125	<1
490	505	13'			72*	490	505	15'	180	12	120	15	310	70	<1
			* - Sample taken with core grinder.					EOH							
					Best intersections:										
					including:	393	415'9"	22'9"	2200	22			915	380	5
						409	415'9"	6'9"	4910	23			1270	740	8
					also:	436	453'6"	17'6"	5210	24			1640	1250	22

469050 C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME ROYAL GEORGE No. ....

PLAN - MAP REFERENCE.....

CO-ORDINATES 440'S, 104'W AZIMUTH 045° MAG DRILLERS BHP COMMENCED May 1957 DEPTH 614'2" HOLE No. BHP 1  
 RL COLLAR 10.11' INCLINATION 60° DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s) 25816 + 819

DEPTH		TAS MINES DEPT		AMDEL CHECK	Sample No.	From	To	* Rec	ASSAY VALUES (Analysed by <u>NS</u> )						
from	To	ASSAY-Sn	SAMPLE N°.	ASSAYS-Sn	No.	Fe	Fe	Fe	Sn	U	W	Pb	Zn	Cu	Ag
0	401'3"	Nil	516			0	401'3"		NOT SAMPLED						
01'3"	411'3"	Nil	517		717817	401'3"	411'3"	9'6"	115	24			380	20	1
1'3"	414'4"	Nil	518		18	411'3"	418'6"	6'8"	225	12			1400	120	9
4'4"	415'11"	Trace	519		19	418'6"	426'3"	7'	100	16			220	20	<1
5'11"	418'6"	Trace	520		20	426'3"	431	6'4"	70	16			140	15	<1
8'6"	426'3"	Trace	521		21	431	435'6"	6'	135	16			270	30	1
26'3"	435'6"	Nil	522		22	435'6"	441'6"	5'6"	690	33			420	140	8
35'6"	441'6"	Trace	523		23	441'6"	451'3"	8'1"	175	28			210	20	<1
41'6"	451'3"	Trace	524		24	451'3"	460'3"	8'5"	900	20			720	55	1
51'3"	460'3"	Trace	525		2200	25	460'3"	466'6"	5'6"	1830	<4		1000	600	10
60'3"	461	0.45%	526		690	26	466'6"	471'6"	5'9"	595	<4		400	135	2
61	469	Trace	527		820	27	471'6"	476'7½"	5'3"	710	<4		480	290	2
69	475'2½"	Trace	528		1450	28	476'7½"	482'7½"	4'7"	1185	4		900	400	3
75'2½"	476'7½"	Trace	529		8400	29	482'7½"	488'3½"	5'4"	9100	16		1500	880	17
76'7½"	478'8"	Trace	530		1250	30	488'3½"	494'3½"	5'4"	1375	16		1000	155	3
78'8"	481'4"	0.10%	531		830	31	494'3½"	501'6½"	6'7"	975	16		860	1300	14
81'4"	482'7½"	Trace	532		1950	32	501'6½"	505'	3'8"	1740	36		1200	380	8
82'7½"	488'3½"	1.62%	533	482'7½" - 511'½"	1750	33	505'	511'½"	6'1"	1505	24		1200	180	5
88'3½"	494'3½"	Trace	534	- 28'5" @	1200	34	511'½"	516'5"	5'7"	1005	20		580	440	7
94'3½"	504	0.32%	535	0.49% Sn	630	35	516'5"	522'7"	6"	555	28		460	40	<1
104	505	0.47%	774		660	36	522'7"	531'9"	7"	615	16		420	370	3
505	508'2"	Nil	775		290	37	531'9"	540'11"	7'10"	220	24		240	35	<1
08'2"	511'½"	0.30%	776		920	38	540'11"	547'	6'1"	710	20		960	65	1
½"	512'5"	Nil	777		260	39	547'	553'1½"	5'9"	230	20		280	30	<1
2'5"	514'4"	0.16%	778		2600	40	553'1½"	562	6'10"	2100	20		2000	110	4
4'4"	516'5"	Trace	779			41	562	572	6'2"	50	20		340	30	<1
6'5"	531'9"	Trace	780			42	572	578'6"	6'6"	985	28		500	25	1
3'9"	540'11"	Trace	781			43	578'6"	586	7'3"	355	24		700	30	1
40'11"	542	0.29%	782			44	586	592	5'4"	605	20		400	20	<1
542	553'1½"	Trace	783			45	592	600	8'3"	65	20		210	30	<1
½"	553'9"	Trace	784			46	600	608	8'6"	125	24		230	20	<1

\* - core remaining at time of CRAE sampling.  
 CRAE samples are quartered A size core

469051

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME... ROYAL GEORGE No. 01  
PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. BHP 1  
RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s) 25816

DEPTH		TAS MINES DEPT		Sample No.	From (M) Ft	To (M) Ft	Rec (M) Ft	ASSAY VALUES (Analysed by ALS)						
om (M) FT	TR (M)	ASSAY-Sn	SAMPLE NO.					ppm Sn	U	W	Pb	Zn	Cu	Ag
33'9"	554'8 1/2"	Trace	785	717847	608	614'2"	6'7"	130	24			700	40	1
48'3"	557'1/2"	0.27%	786			EOM								
7'1/2"	572	Nil	787											
72	586	Nil	788											
86	592	Trace	789											
92	600	Nil	790											
00	608	Nil	791											
08	611'7"	Nil	792											
7"	612'7"	Trace	793											
27"	614'2"	Nil	794											
<p>87: Mines Dept Samples comprise half-split A size core. Sample pulp not missing.</p>														

Best intersection including:

482'7 1/2" 511'1/2" 28'5" 2890 20 1130 620 10  
482'7 1/2" 505' 22'5 3250 19 1110 740 11

469052 C.R.A. EXPLORATION PTY, LIMITED  
DRILL CORE LOG

SHEET No. 1 of 1  
TENEMENT NAME ROYAL GEORGE No. 1  
PLAN - MAP REFERENCE

CO-ORDINATES 774'S, 247'E AZIMUTH 045° MAG DRILLERS BHP COMMENCED ..... DEPTH 624' HOLE No. BHP 2  
RL COLLAR IRDA' INCLINATION 60° DRILL TYPE ..... COMPLETED JUNE-JULY 1957 CASING LEFT ..... DPO No(s) 25816

DEPTH		TAS MINES DEPT		Sample No.	From Ft	To Ft	* Rec Ft	ASSAY VALUES (Analysed by ALS)						
ft	To ft	ASSAY-Sn	SAMPLE N°					ppm	Sn	U	W	Pb	Zn	Cu
260'	260'9"	NOT SAMPLED		795010	600'	606'	3'	3200	24		1300	270	5	
262'	262'1"	Nil	834	CRAE samples are quartered A size core.										
445'	445'9"	NOT SAMPLED												
446'	446'6"	0.11%	894											
449'	449'	0.08%	895											
453'	453'	0.22%	1143	449-461'										
455'	455'6"	0.37%	1144	12' @ 0.21% Sn										
458'	458'	0.11%	1145											
461'	461'	0.14%	1146											
604'	604'	NOT SAMPLED												
624'	624'	Trace	1147											

near Dept samples are  
P- split A size core  
some pulps have been lost  
of core now missing.

\* - Core remaining at  
CRAE sampling.

469053

C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

TENEMENT NAME ROYAL GEORGE No. 3

PLAN - MAP REFERENCE.....

CO-ORDINATES 602'S, 65'E AZIMUTH 045° MAG DRILLERS BHP COMMENCED..... DEPTH 510' 5" HOLE No. BHP 3

RL COLLAR 1014 INCLINATION 60° DRILL TYPE..... COMPLETED SEPT 1957 CASING LEFT..... DPO No(s) 25816

DEPTH		TAS MINES DEPT			Sample No.	From Ft	To Ft	* Rec Ft	ASSAY VALUES (Analysed by ALS)					
From Ft	To Ft	ASSAY-Sn	SAMPLE N°	PPM										
								Sn	U	W	Pb	Zn	Cu	Ag
56' 5"	456' 9"	0.2%	1115	456' 5" - 467' 4"		0	456'	NOT	SAMPLED					
56' 9"	457' 4"	Trace	1116	10' 11" @ 0.27% Sn	717848	456	461	4' 2"	2900	16		2200	140	3
57' 4"	459' 4"	0.97%	1117		49	461	466	4' 4"	2800	20		580	420	10
59' 4"	461' 3 1/2"	Trace	1118		717850	466	474	6' 9"	305	32		960	2800	70
61' 3 1/2"	464' 4"	0.16%	1119		795001	474	481' 6"	6' 6"	710	28		1600	1000	12
64' 4"	467' 4"	0.10%	1120		02	481' 6"	484' 6"	0' 6"	50	20		840	20	1
67' 4"	470' 4"	Trace	1121		03	484' 6"	493	7' 11"	700	24		1100	90	2
70' 4"	473' 4"	Trace	1122		04	493	501' 6"	7' 11"	500	28		420	50	<1
73' 4"	477' 1"	Trace	1123		05	501' 6"	510' 5"	7' 6"	660	24		400	400	3
77' 1"	478' 5"	0.31%	1124				EOH							
78' 5"	481' 6"	Trace	1125			456	466	10'	2850	18		1390	280	6
8' 6"	488' 5"	Trace	1126			456	474	18'	1720	24		1200	1400	35
88' 5"	491' 4"	0.17%	1127											
9' 4"	508	Trace	1128											
08	510' 5"	0.11%	1129											

Best intersection:  
also:

\* Core remaining at CRAE sampling.  
CRAE samples comprise quartered A size core.

Note: Mines Dept samples comprise 1/4" A size core. Sample pulps was lost.

469054 C.R.A. EXPLORATION PTY. LIMITED  
DRILL CORE LOG

SHEET No. 1  
TENEMENT NAME ROYAL GEORGE No. 0  
PLAN - MAP REFERENCE  
DEPTH 370' HOLE No. BG-80  
(RINGWOOD)  
COMPLETED 1955 CASING LEFT DPO No(s)

CO-ORDINATES S51°S 121'E AZIMUTH 045° MAG DRILLERS  
RL COLLAR 1026' INCLINATION 43.5° DRILL TYPE

DEPTH		Core Rec. (M)	Core Size	Graphic Log	Sample No.	From Ft	To Ft	Rec	ASSAY VALUES (Analyzed by <u>Mines Dept</u> <u>CBMC</u> )	
From (M)	To (M)								Sn	U
						0	240'		NOT SAMPLED	
						240	243'6"	Trace	12	
						243'6"	249	Nil	43	
						249	255	Nil	57	
						255	260	Nil	120	
						260	265	Nil	49	
						265	267'6"	Nil	58	
						267'6"	269	0.58%	190	
						269	275	Nil	140	
						275	279	Nil	98	
						279	284	Trace	100	
						284	289'6"	Nil	70	
						289'6"	296	0.11%	61	
						296	302	0.67%	110	296-323:- 27 2 0.64% Sn
						302	307	0.64%	40	
						307	313	Trace	130	
						313	316	0.89%	175	
						316	323	1.0%	76	
						323	326	Trace	130	
						326	332'6"	Nil	180	
						332'6"	337'6"	Nil	77	
						337'6"	342'6"	0.16%	150	
						342'6"	350	0.25%	86	
						350	354	Nil	50	
						354	356	Nil	80	
						356	370	Trace	50	
							EOH			

Note: Core and all sample pulps are now missing.

APPENDIX III

UNDERGROUND SAMPLING RESULTS.

469056

C.R.A. EXPLORATION PTY, LIMITED

TENEMENT NAME ROYAL GEORGE No. 02

PLAN - MAP REFERENCE

UNDERGROUND SAMPLING - 2 LEVEL

DPO No(s) 25819

				TAS MINES DEPT			ASSAY VALUES (Analysed by <i>Andel</i> )									
				SAMPLE NO	Sn	Sample No.	From	To	Rec	PPM						
										Sn	U	Zn	Cu	Ag		
FACE IN X CUT, SOUTH END OF				663495	0.63%	795011	0	3' 4"	3' 4"		30	5300	1300	16		
2 LEVEL - SECTION G-G1				96	Trace	12	3' 4"	5' 7"	2' 3"		30	1000	400	1		
				97	0.63%	13	5' 7"	7' 2"	1' 7"		30	4800	1300	12		
				98	0.37%	14	7' 2"	17'	9' 10"		48	2000	730	5		
				99	0.09%	15	17'	18' 2"	1' 2"		65	3900	520	7		
				663500	0.22%	16	18' 2"	31' 4"	13' 2"		75	1900	1100	8		
				<i>Average:</i>	0.31%			31' 4"			56	2450	940	8		

469057

C.R.A. EXPLORATION PTY. LIMITED

SHEET No. 1

TENEMENT NAME ROYAL GEORGE No. 3

PLAN - MAP REFERENCE.....

.....UNDERGROUND SAMPLING - .....3 LEVEL.....

DPO No(s) 25820

continuous channel  
samples taken by  
onwall Coal Co.  
July 1969.

				TAS MINES DEPT				Sample No.	From Ft	To Ft	Rec	ASSAY VALUES (Analysed by <u>Amel</u> )				
				SAMPLE NO	Cu	As	Sn					Sn	U	Zn	Cu	Ag
SHAFT X CUT - NORTH WALL :				691258	0.11%	0.40%	0.53%	795052	40"	42		6400	32	3600	1150	22
				59			0.07%	53	42	46' 6"		670	55	1500	240	1
*Distance from survey line in shaft.				60	0.09%	0.40%	0.91%	54	46' 6"	47' 10"		1042	40	4700	960	19
				61			0.08%	55	47' 10"	49' 2"		1150	80	6800	490	6
				62	0.12%	0.65%	0.72%	56	49' 2"	53' 8"		9200	50	5100	1300	20
				63			0.10%	57	53' 8"	57' 2"		1050	34	2000	250	2
				64	0.13%	0.92%	0.72%	58	57' 2"	59' 7"		9400	60	3600	1450	28
								Average:		19' 7"		5050	49	3470	790	13
SHAFT X CUT - SOUTH WALL - 1ST SAMPLE				691251	0.11%	0.47%	1.6%	795045	38"	40		1822	26	1800	1200	21
				52			0.03%	46	40	44' 7"		710	38	1450	240	<1
				53	0.14%	0.44%	0.74%	47	44' 7"	46' 1"		8950	34	4500	1500	29
				54			0.03%	48	46' 1"	46' 7"		806	42	5600	360	5
				55	0.12%	0.47%	0.91%	49	46' 7"	52' 7"		9900	40	7900	1300	22
				56			0.23%	50	52' 7"	55'		2850	50	2200	350	3
				57	0.19%	1.20%	0.78%	51	55	57' 10"		8900	34	2800	2000	44
								Average:		19' 10"		7310	38	4060	1020	18
SHAFT X CUT - SOUTH WALL - 2ND SAMPLE				692359	0.09%		1.63%	795040	38"	40		1.62%	24	1850	1000	21
				60	0.01%		Trace	41	40	44' 7"		290	32	890	140	<1
				61	0.10%		0.66%	42	44' 7"	52' 7"		8500	34	4500	1150	19
				62	0.03%		0.20%	43	52' 7"	55		2450	50	2500	370	4
				63	0.18%		0.85%	44	55	57' 10"		1.03%	34	2800	2100	45
								Average:		19' 10"		6900	34	2910	940	17

469058

C.R.A. EXPLORATION PTY. LIMITED

SHEET No. 1

TENEMENT NAME ROYAL GEORGE No.

PLAN - MAP REFERENCE

## UNDERGROUND SAMPLING - A LEVEL

DPO No(s) 25820

007

		TMS MINES DEPT			Sample No.	From Ft	To Ft	Rec	ASSAY VALUES (Analysed by <i>Amal</i> )					
		SAMPLE NO	Cu	Sn					PPM					
					Sn	U	Zn	Cu	Ag					
outflows channel samples taken by ornwall Coal Co December 1969.	100' SOUTH X CUT :		692366	0.11%	0.58%	795017	Footwall	4' 8"		7100	30	2800	1250	22
			67	0.02%	Trace	18	4' 8"	8' 8"		920	26	1650	220	1
			68	0.17%	0.59%	19	8' 8"	18' 10"		7500	32	2700	1950	34
			69	0.02%	Trace	20	18' 10"	22' 2"		680	26	2300	190	<1
			70	0.05%	0.28%	21	22' 2"	26'		3950	28	2500	490	5
						Average:		26'		5020	29	2480	1120	18
	50' SOUTH X CUT :		692549	0.18%	0.52%	795022	Footwall	1' 3"		6650	55	4000	1950	27
			50	0.01%	Trace	23	1' 3"	3' 9"		570	80	1450	140	<1
			51	0.08%	0.52%	24	3' 9"	5'		5600	46	3800	870	10
			52	0.01%	Nil	25	5'	6' 6"		160	34	1300	120	<1
			53	0.07%	0.65%	26	6' 6"	11' 8"		7150	30	6100	910	15
			54	0.01%	Trace	27	11' 8"	14' 2"		390	30	1600	120	<1
			55	0.09%	0.39%	28	14' 2"	16' 5"		4900	30	3700	970	21
			56	0.01%	Trace	29	16' 5"	18' 5"		490	36	1400	130	<1
			57	0.02%	0.20%	30	18' 5"	19' 4"		2400	85	2300	200	<1
			58	0.01%	Trace	31	19' 4"	20' 10"		280	60	1050	150	<1
			59	0.18%	0.60%	32	20' 10"	27' 10"		6800	46	3800	2000	42
						Average:		27' 10"		4210	44	3310	910	17
	SHAFT X CUT - SOUTH WALL		692565	0.07%	0.48%	795033	37' 7"	44' 4"		5550	26	3200	790	11
			66	0.01%	Trace	34	44' 4"	46' 5"		420	30	1050	120	<1
		*Distance from survey line in shaft	67	0.07%	0.98%	35	46' 5"	51' 9"		104%	26	2500	730	11
			68	0.01%	Trace	36	51' 9"	53' 11"		200	24	500	130	<1
			69	0.17%	0.56%	37	53' 11"	55' 7"		6300	30	3600	1750	39
			70	0.02%	Trace	38	55' 7"	60' 3"		490	28	710	190	1
			71	0.07%	0.67%	39	60' 3"	64' 10"		7050	28	2300	800	15
						Average:		27' 3"		5110	27	2130	630	10

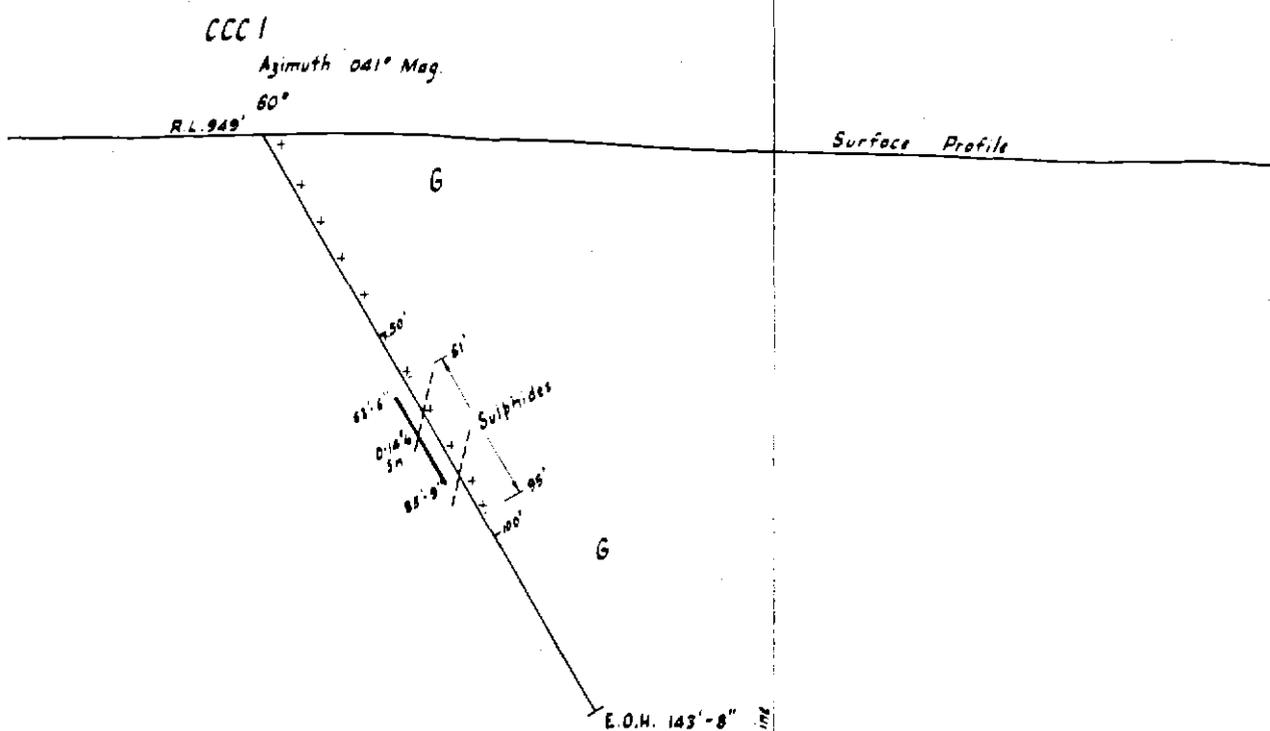
APPENDIX 2

Drillhole Cross Sections  
(Drawn by CRAE - Purvis, 1979)

S.W.

N.E.

R.L. 1000'



LEGEND

-  Mineralised fractures or 'greisen' bands
- G Altered biotite granite with tourmaline
- + 'Greisenised' zone or occasional 'greisen' bands within the granite

C.R.A. EXPLORATION PTY. LIMITED

E.L. 7/78 - N.E. TASMANIA  
ROYAL GEORGE MINE  
DRILL SECTION CCC 1  
LOOKING N.W.

geologist: J.B.P.	scale: 1:500	report no: 9786
drawn: T.B.D.S.	date: August 1979	plan no: Tc143

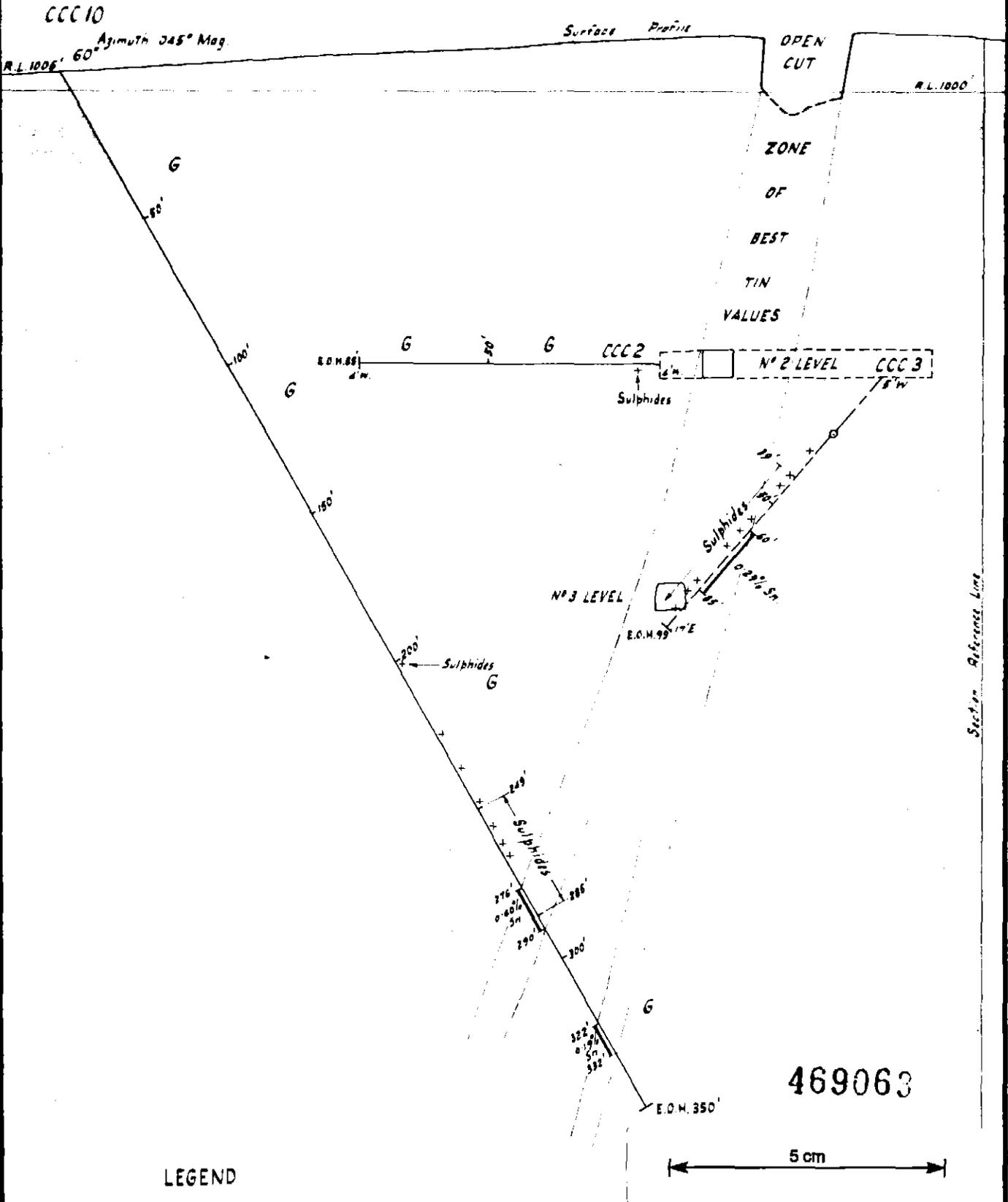




059

S.W.

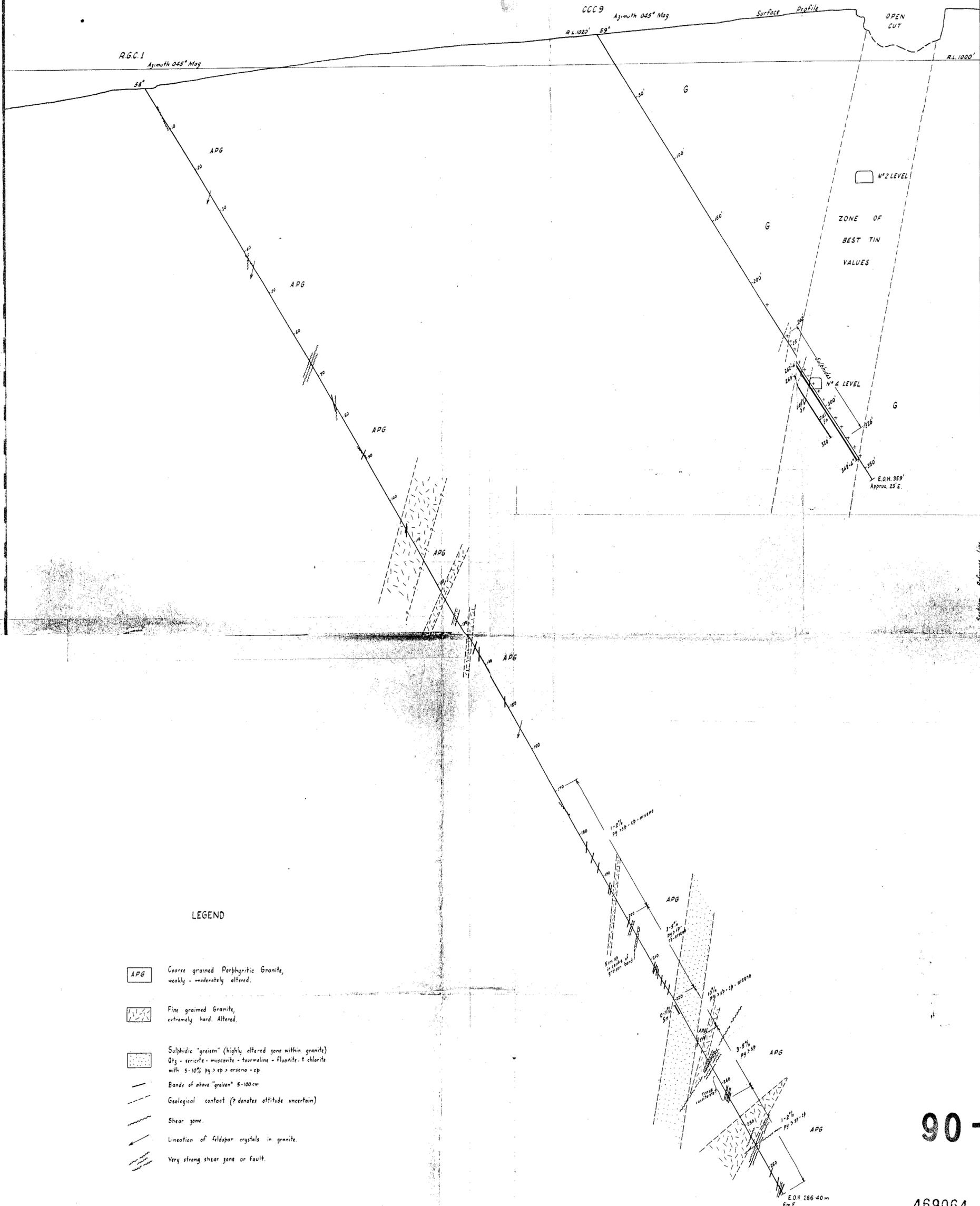
N.E.



LEGEND

-  Mineralised fractures or 'greisen' bands
-  Altered biotite granite with tourmaline
-  'Greisenised' zone or occasional 'greisen' bands within the granite

<b>C.R.A. EXPLORATION PTY. LIMITED</b>		
E.L. 7/78 - N.E. TASMANIA		
ROYAL GEORGE MINE		
DRILL SECTION CCC 2,3 & 10		
LOOKING N.W.		
geologist: J.G.P.	scale: 1:500	report no: 9786
drawn: T.G.D.S.	date: August 1979	plan no: Tc144



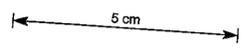
LEGEND

- - - Mineralised fractures or 'greisen' bands
- G Altered biotite granite with tourmaline
- + 'Greisenised' zone or occasional 'greisen' bands within the granite

LEGEND

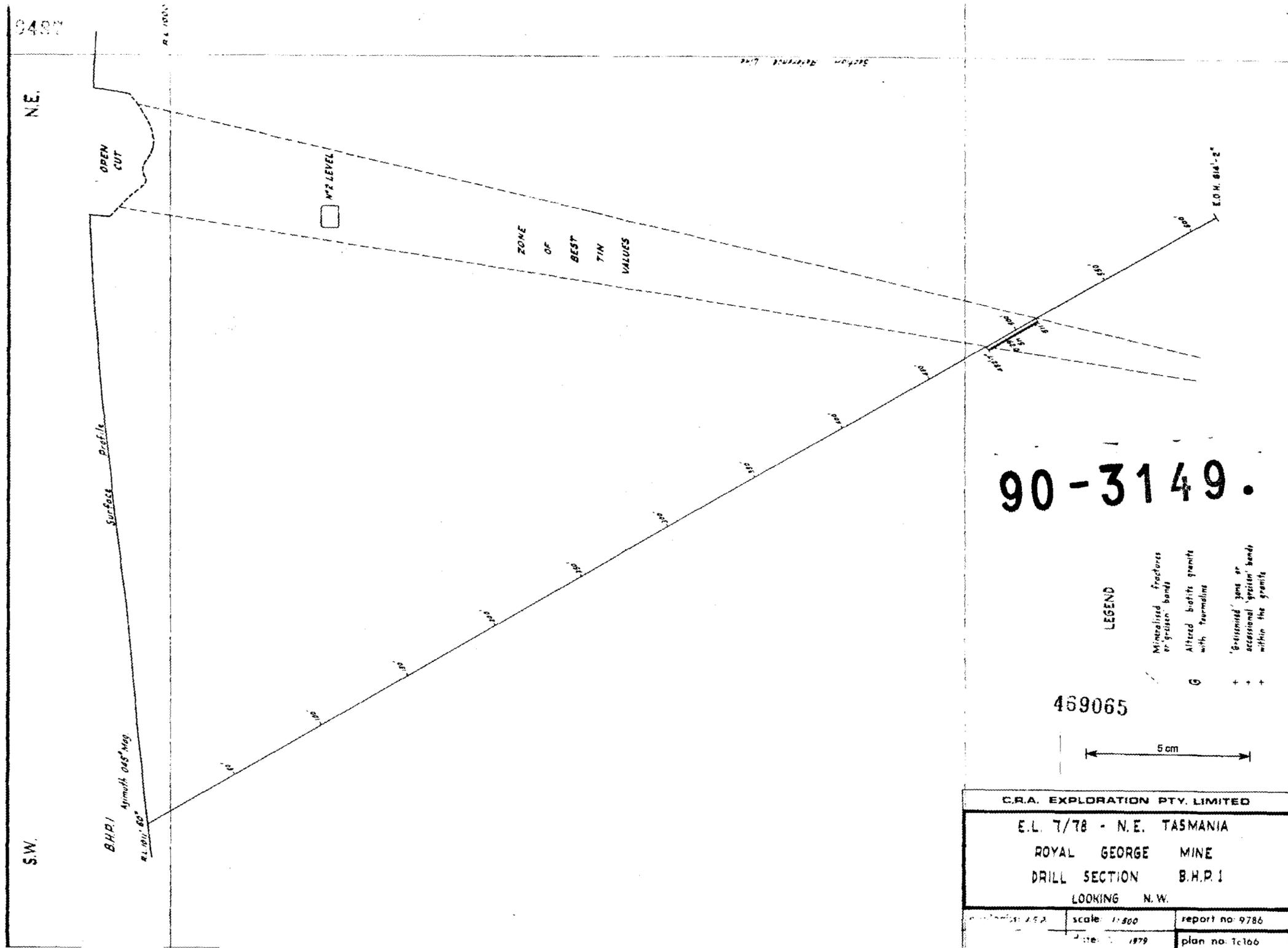
- APG Coarse grained Parphyritic Granite, weakly - moderately altered.
- Fine grained Granite, extremely hard. Altered.
- Sulphidic "greisen" (highly altered zone within granite) Qtz - sericite - muscovite - tourmaline - fluorite - chlorite with 5-10% py > ep > arseno - ep
- Bands of above "greisen" 5-100cm
- Geological contact (? denotes attitude uncertain)
- Shear zone.
- Lineation of feldspar crystals in granite.
- Very strong shear zone or fault.

90-3149.



469064

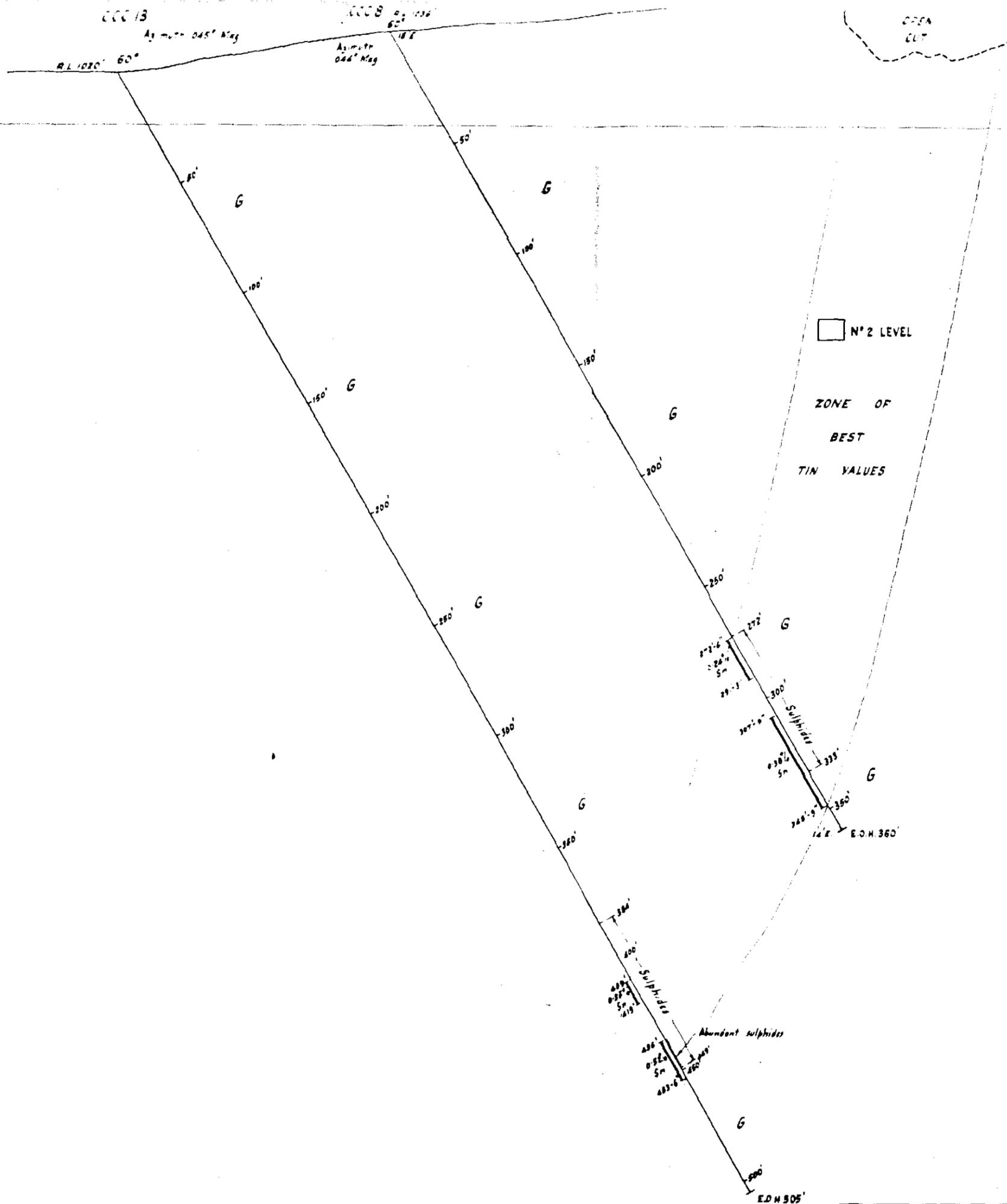
C.R.A. EXPLORATION PTY. LIMITED		
E.L. 7/78 - N.E. TASMANIA		
ROYAL GEORGE MINE		
DRILL SECTION CCC9 & RGC1		
LOOKING N.W.		
geologist: J.G.P.	scale: 1:500	report no: 2744
drawn: T.G.S.	date: Oct 1979	plan no: 1/165



S.W.

N.E.

6488

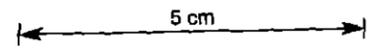


# 90-3149.

### LEGEND

- Mineralised fractures or 'greisen' bands
- Altered biotite granite with tourmaline
- 'Greisenized' zone or occasional 'greisen' bands within the granite

469066



C.R.A. EXPLORATION PTY. LIMITED		
E.L. 7/78 - N.E. TASMANIA		
ROYAL GEORGE MINE		
DRILL SECTION CCC 8 & 13		
LOOKING N.W.		
geologist: J.B.P.	scale: 1:500	report no: 9786
drawn: T.G.D.S.	date: August 1979	plan no: Tc164

8499

N.E.

RL 1000'

Section Reference Line

OPEN CUT

Surface Profile

Nº 2 LEVEL

E.O.M. 370'

Minas Dept Assays

Sulphides

Tuffs

E.O.M. 510'-5"

ALS Assays

90-3149.

LEGEND

- Mineralised fractures or 'greisen' bands
- Altered biotite granite with tourmaline
- 'Greisenised' zone or occasional 'greisen' bands within the granite

469067

5cm

C.R.A. EXPLORATION PTY. LIMITED

E.L. 7/78 - N.E. TASMANIA

ROYAL GEORGE MINE

DRILL SECTION B.H.P. 3

LOOKING N.W.

geologist: J.G.P. scale: 1:500 report no: 9786

drawn: T.G.D.S. date: Oct. 1979 plan no: Tc168

S.W.

BG-80 (Ringwood)

Azimuth 045° Mag.

43.5°

RL 1000'

Azimuth 045° Mag.

RL 1014'

B.H.P. 3

60°

50'

100'

150'

200'

250'

300'

350'

400'

450'

50'

100'

150'

200'

250'

300'

350'

400'

450'

500'

550'

600'

650'

700'

750'

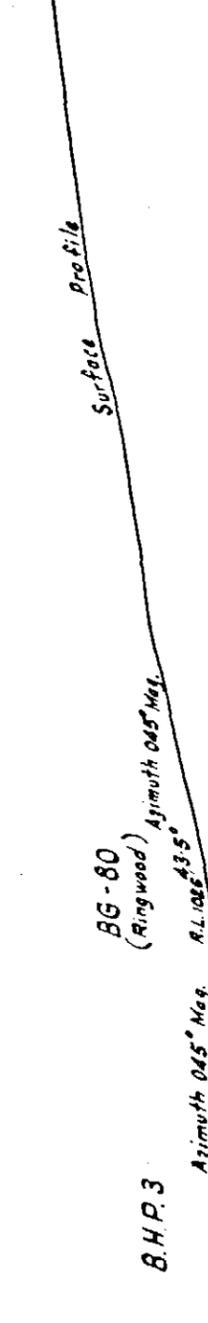
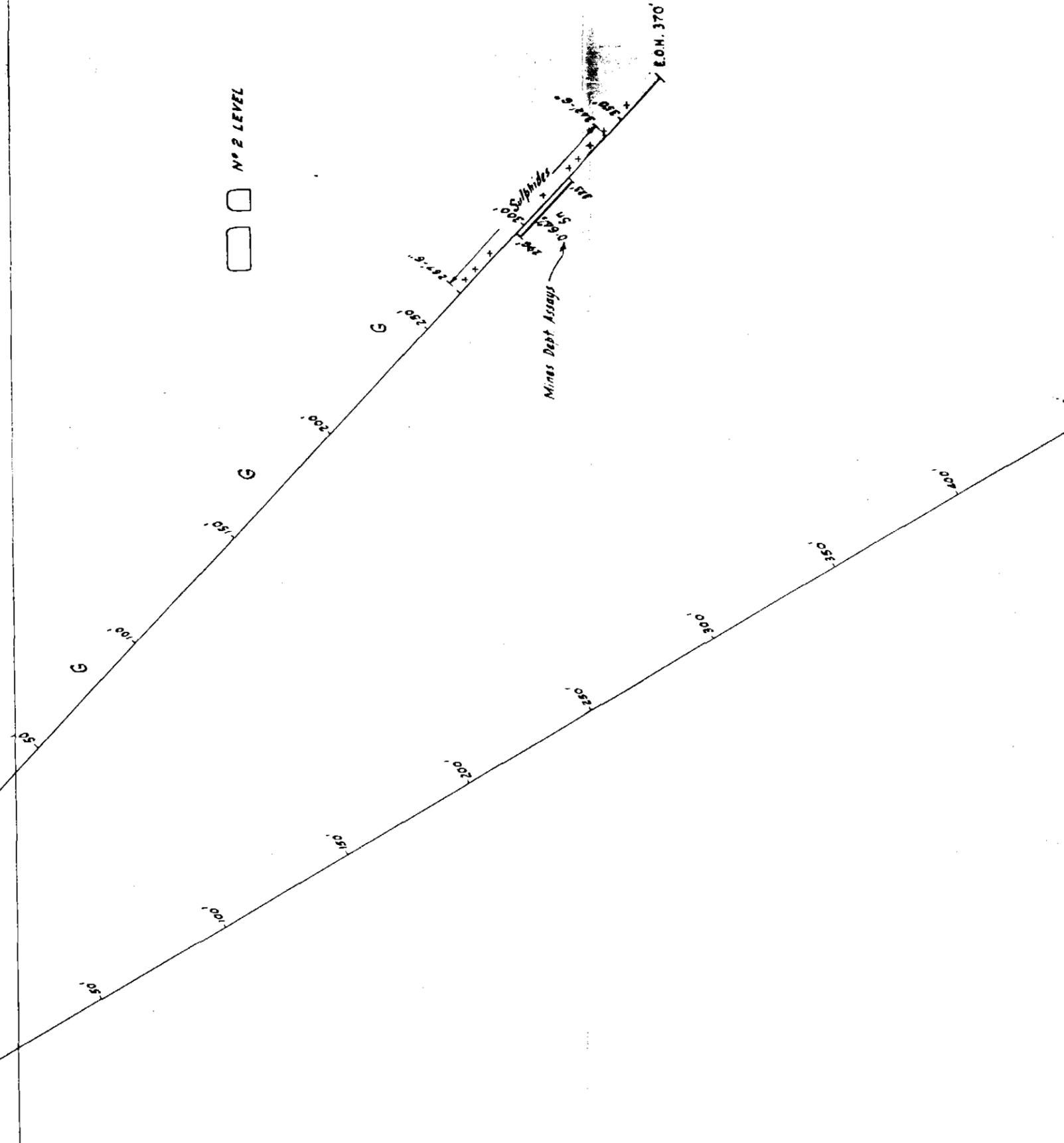
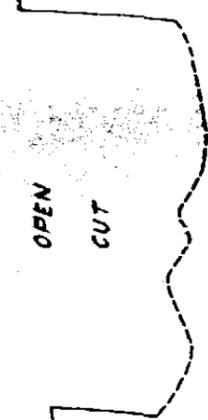
800'

850'

900'

950'

1000'



BG-80 (Ringwood)

Azimuth 045° Mag.

43.5°

RL 1000'

Azimuth 045° Mag.

RL 1014'

B.H.P. 3

60°

50'

100'

150'

200'

250'

300'

350'

400'

450'

650'

700'

750'

800'

850'

900'

950'

1000'



S.W.

N.E.

0491

B.H.P.2

Agimuth 045° Mag.

R.L. 1004' 60°

R.L. 1000'

OPEN CUT

N° 2 LEVEL

ZONE OF BEST TIN VALUES

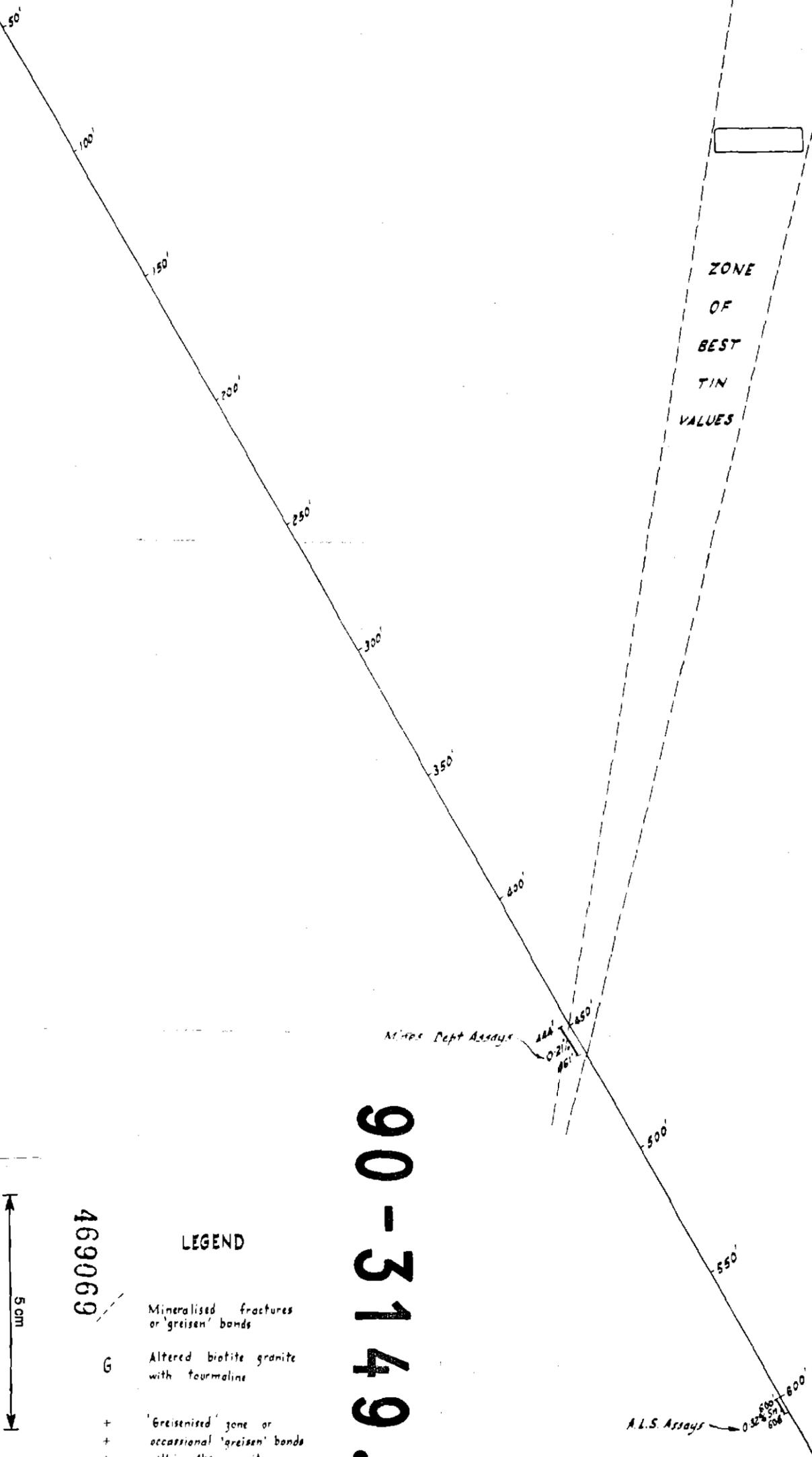
Mines Dept Assays

144' 0.21%  
161'

A.L.S. Assays

0.32%  
0.52%  
0.04%

E.O.H. 624'



90-3149.

LEGEND

469069

- Mineralised fractures or 'greisen' bands
- G Altered biotite granite with tourmaline
- + 'Greisenised' zone or occasional 'greisen' bands within the granite



C.R.A. EXPLORATION PTY. LIMITED

E.L. 7/78 - N.E. TASMANIA

ROYAL GEORGE MINE

DRILL SECTION B.H.P.2

LOOKING N.W.

geologist: J.G.R.

scale: 1:500

report no: 9786

drawn: T.G.O.S.

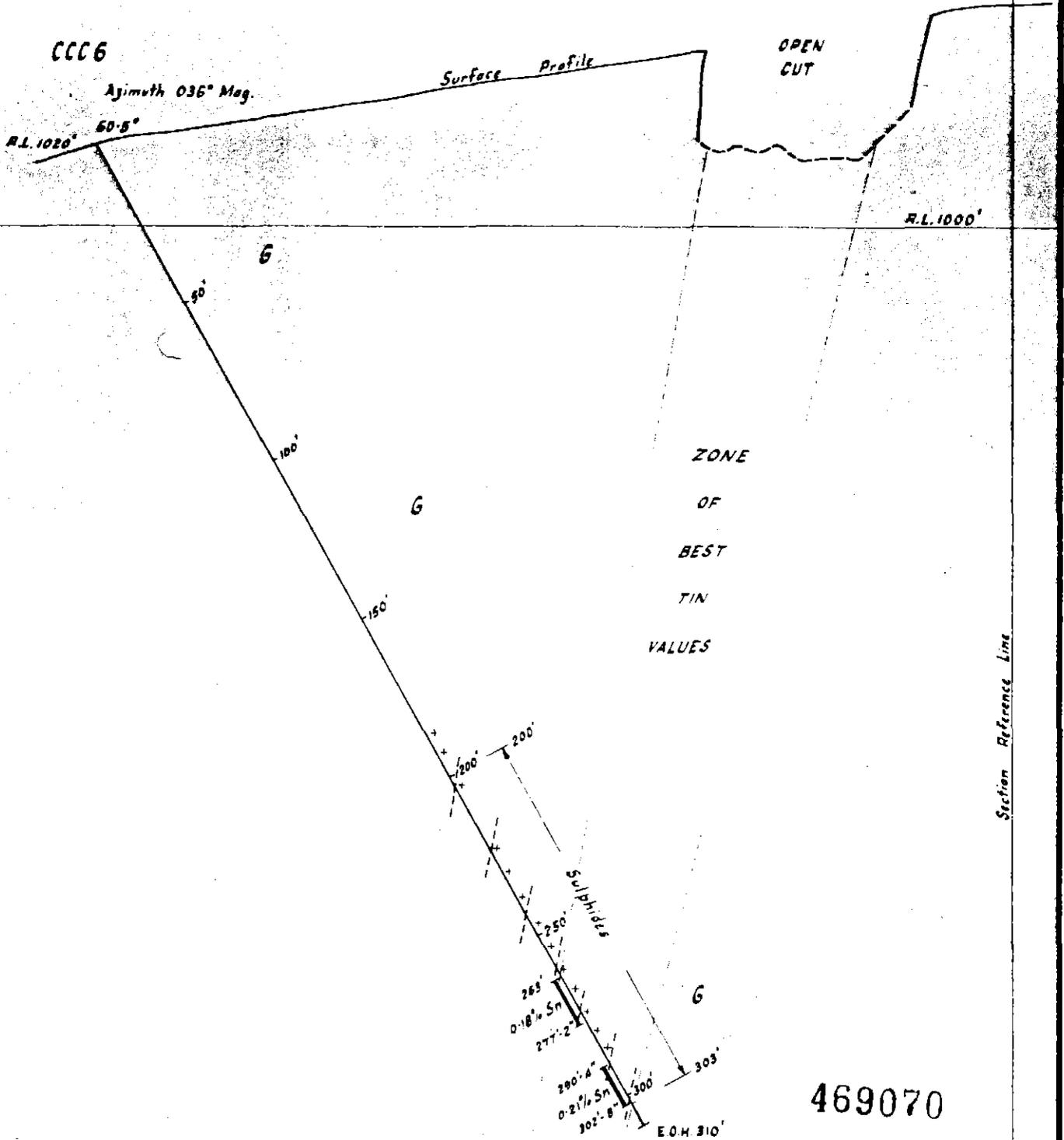
date: Oct 1979

plan no: T.167

064

S.W.

N.E.



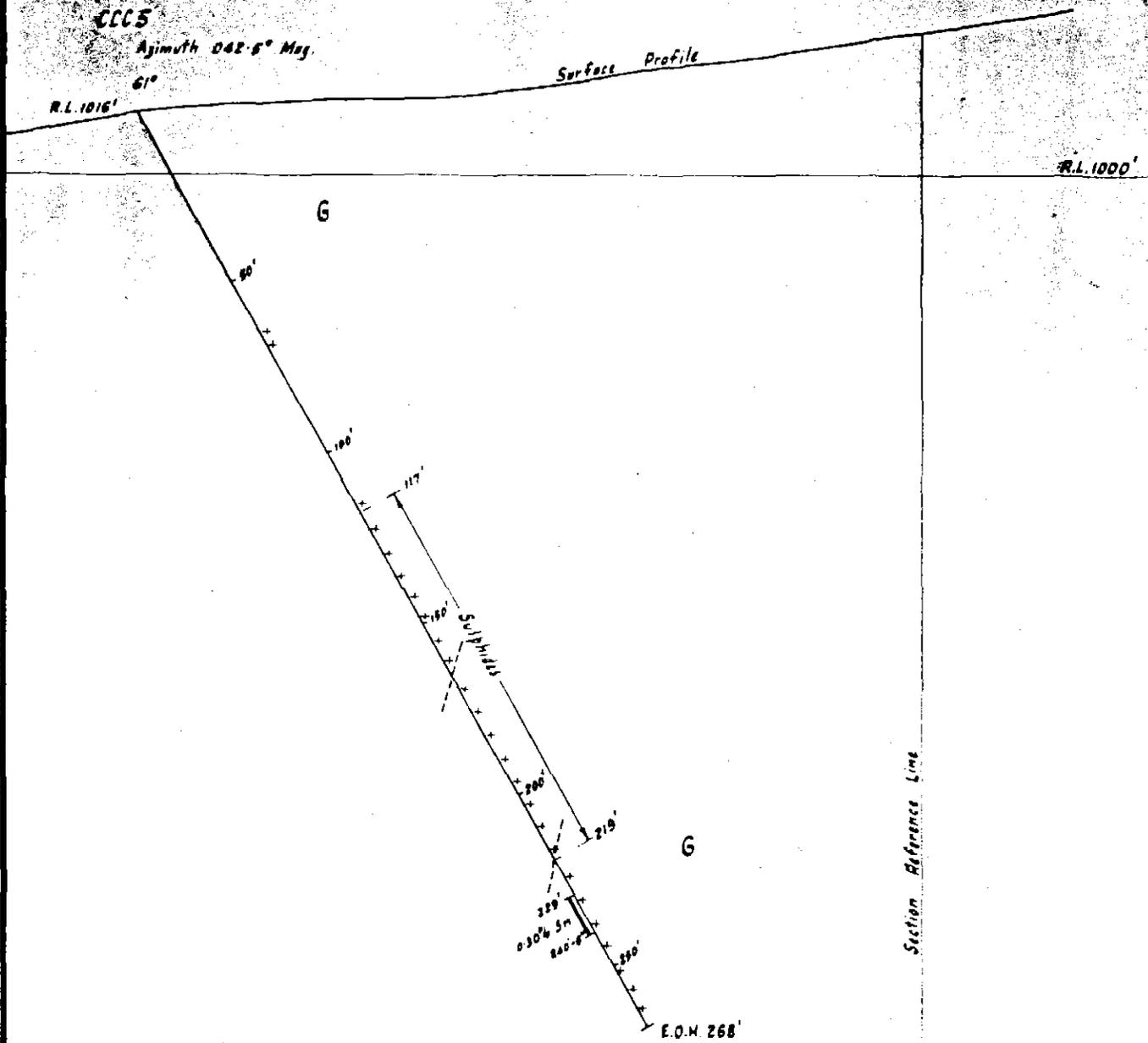
LEGEND

- Mineralised fractures or 'greisen' bands
- G** Altered biotite granite with tourmaline
- +** 'Grisenised' zone or occasional 'greisen' bands within the granite

C.R.A. EXPLORATION PTY. LIMITED		
E.L. 7/78 - N.E. TASMANIA		
ROYAL GEORGE MINE		
DRILL SECTION CCC 6		
LOOKING N.W.		
geologist: J.G.P.	scale: 1:500	report no: 9786
drawn: T.G.D.S.	date: Sept. 1979	plan no: Jc160

S.W.

N.E.



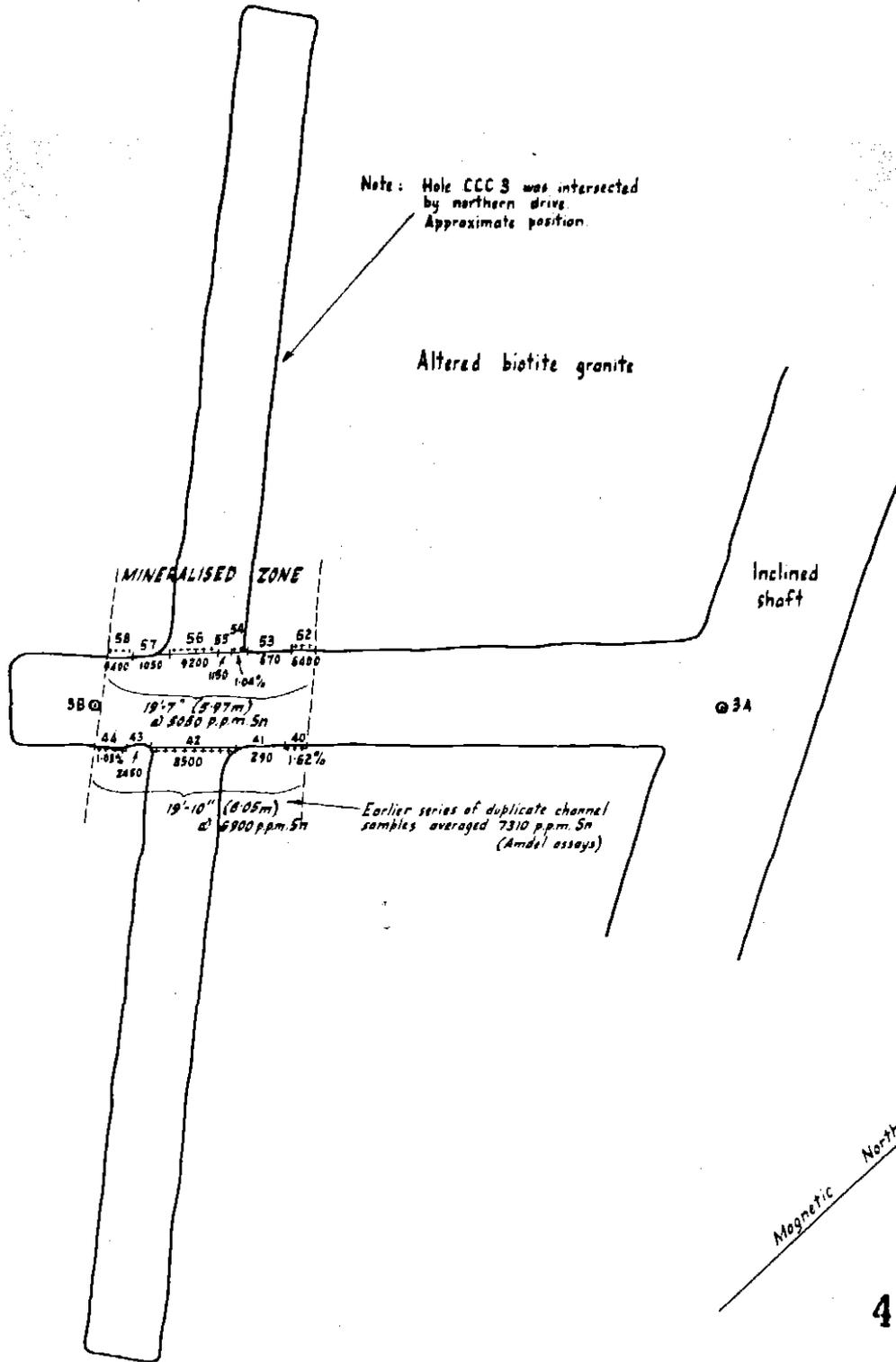
LEGEND

- Mineralised fractures
- G** Altered biotite granite with tourmaline
- 'Greisenised' zone or occasional 'greisen' bands within the granite

469071

C.R.A. EXPLORATION PTY. LIMITED		
E.L. 7/78 - N.E. TASMANIA		
ROYAL GEORGE MINE		
DRILL SECTION CCC 5		
LOOKING N.W.		
geologist: J.S.P.	scale: 1:500	report no: 9786
drawn: T.S.S.	date: August 1979	plan no: Tc145

088



Legend

- +++++ Strongly sulphidic "greisen"
- + + + Moderately "greisenised" sulphidic granite
- 39 C.R.A.E. sample no prefixed 7950
- Channel sample
- 7050 Tin value in p.p.m. (Assays by Amdel)
- ⊙ 3A Survey point

C.R.A. EXPLORATION PTY. LIMITED		
E.L. 7/78 - N.E. TASMANIA		
ROYAL GEORGE MINE		
SAMPLING PLAN - 3 LEVEL		
geologist: J.G.P.	scale: 1:200	report no: 9786
drawn: T.G.D.S.	date: Oct. 1979	plan no: Tc169

469072

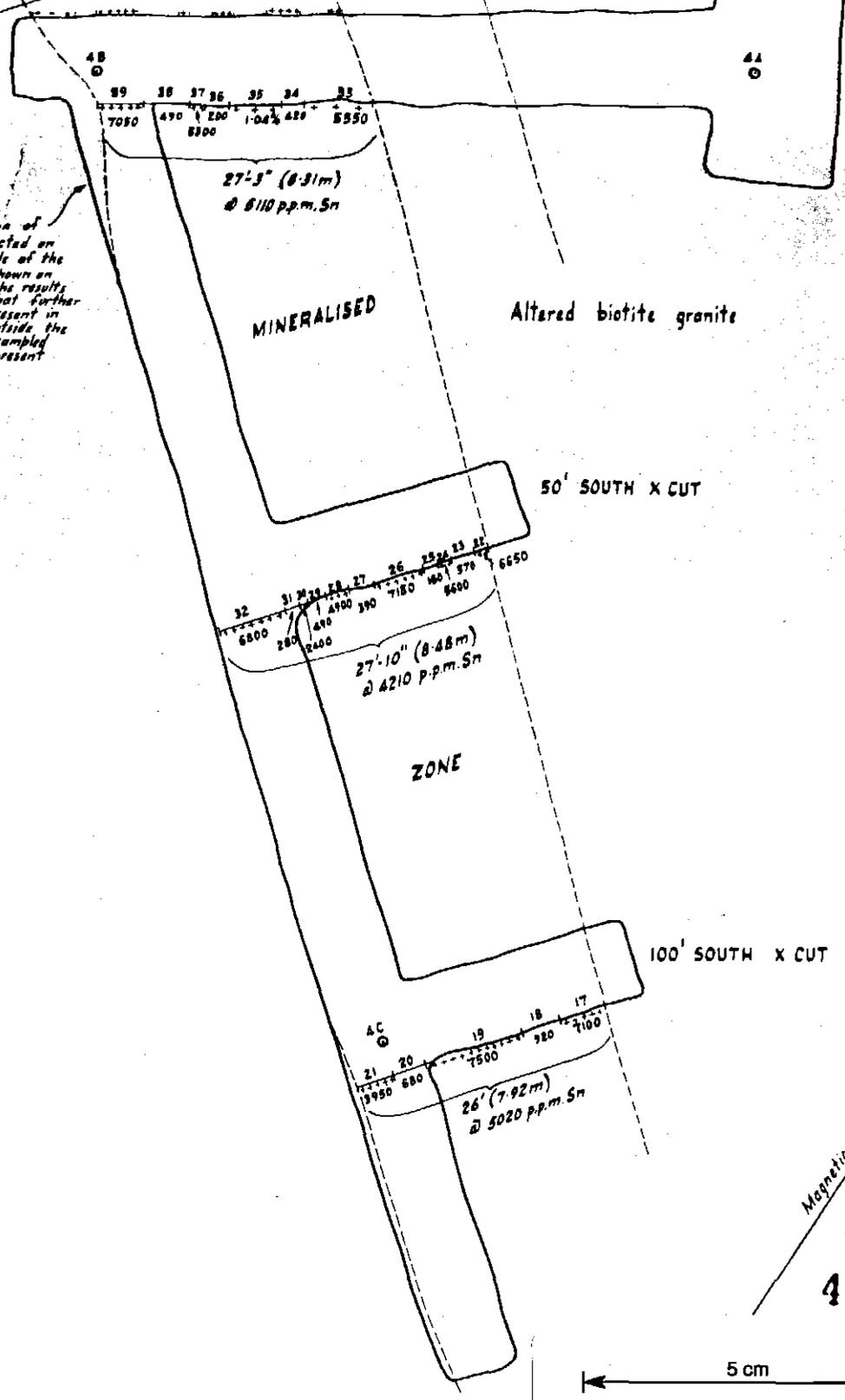
5 cm

087

Approximate limits to mineralisation as in hole CCC9

Inclined shaft

Approximate position of hole CCC9, intersected on the hangingwall side of the A Level drive. As shown on the drill section, the results of CCC9 suggest that further mineralisation is present in the hangingwall outside the drive and that unsampled mineralisation is present in the footwall.



Legend

- +++++ Strongly sulphidic "greisen"
- + + + Moderately "greisenised" sulphidic granite
- 39 C.R.A.E. sample no prefixed 7950
- Channel sample
- 7050 Tin value in p.p.m. (Assays by Amdel)
- Survey point
- 4A

**C.R.A. EXPLORATION PTY. LIMITED**

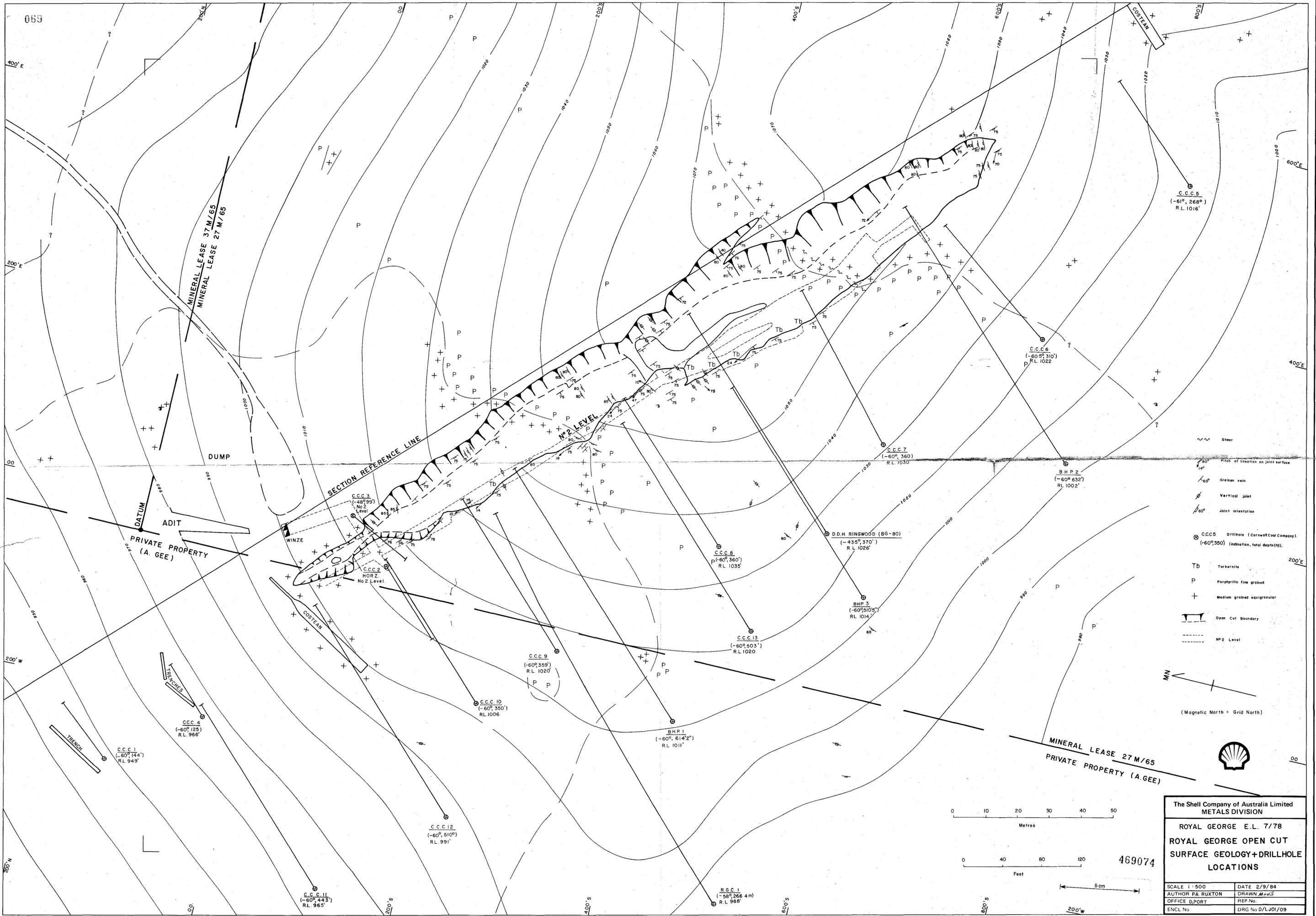
**E.L. 7/78 - N.E. TASMANIA**

**ROYAL GEORGE MINE**

**SAMPLING PLAN - 4 LEVEL**

geologist: J.G.P.	scale: 1:200	report no: 9786
drawn: T.G.D.S.	date: Oct. 1979	plan no: Tc170

469073



- Shear
- Pitch of lineation on joint surface
- Green vein
- Vertical joint
- Joint orientation
- CCC5 Drillhole (Cornwall Coal Company) (-60°350') (inclination, total depth (rd))
- Tb Torbernite
- P Porphyritic fine grained
- + Medium grained equigranular
- Open Cut Boundary
- Nº2 Level

MN  
(Magnetic North = Grid North)



0 10 20 30 40 50  
Metres

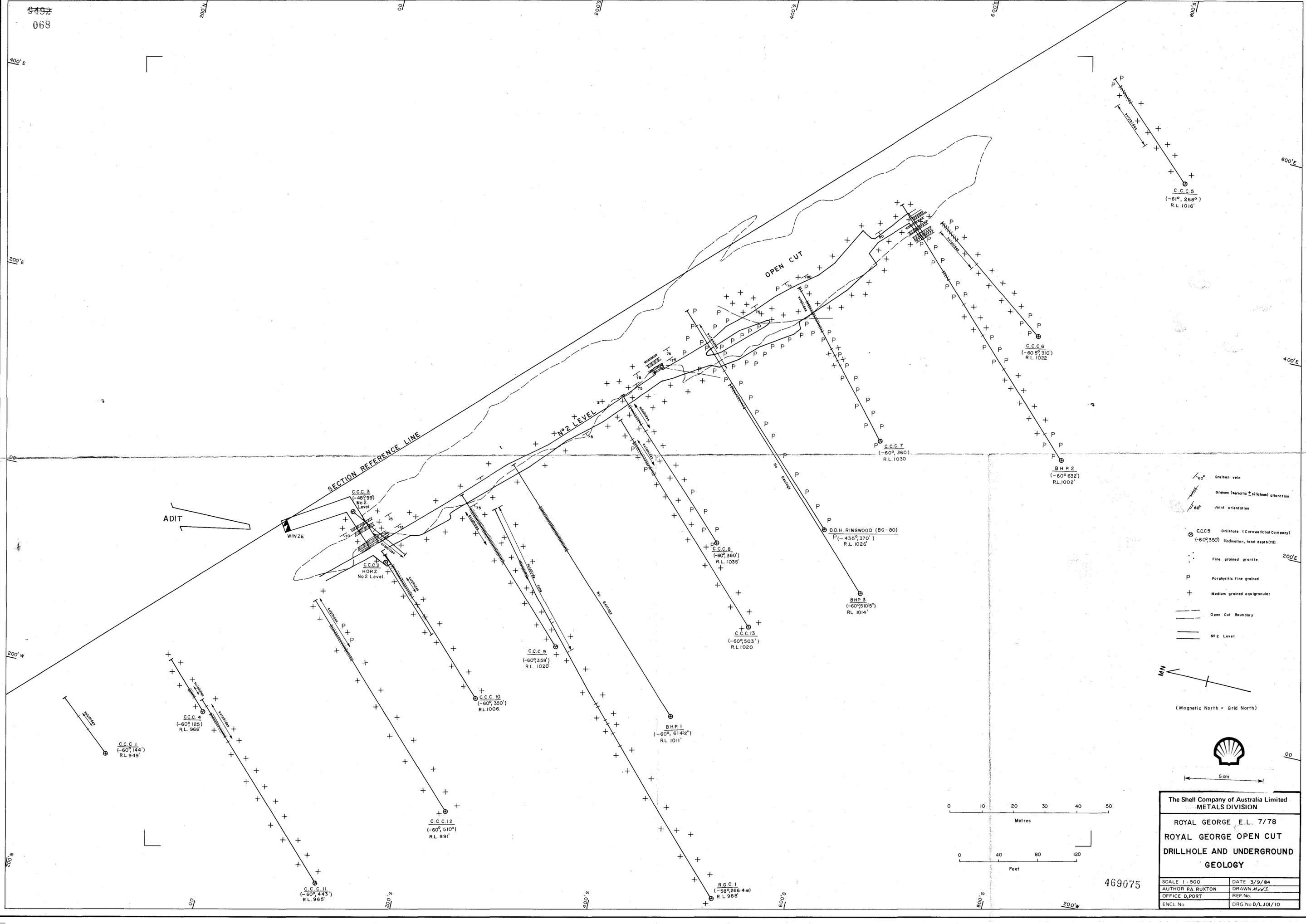
0 40 80 120  
Feet

469074

The Shell Company of Australia Limited  
METALS DIVISION

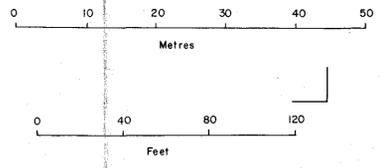
ROYAL GEORGE E.L. 7/78  
ROYAL GEORGE OPEN CUT  
SURFACE GEOLOGY + DRILLHOLE  
LOCATIONS

SCALE 1:500	DATE 2/9/84
AUTHOR PA RUXTON	DRAWN M.W.S.
OFFICE D.PORT	REP No.
ENCL No.	DRG No. D/LJ01/09



- 60° Graben vein
- Graben (sericitic & siliceous) alteration
- Joint orientation
- C.C.C. 5 Drillhole (Corwall Coal Company).  
(-60° 350') (inclination, total depth (ft))
- Fine grained granite
- Porphyritic fine grained
- Medium grained equigranular
- Open Cut Boundary
- No 2 Level

M/N  
(Magnetic North = Grid North)

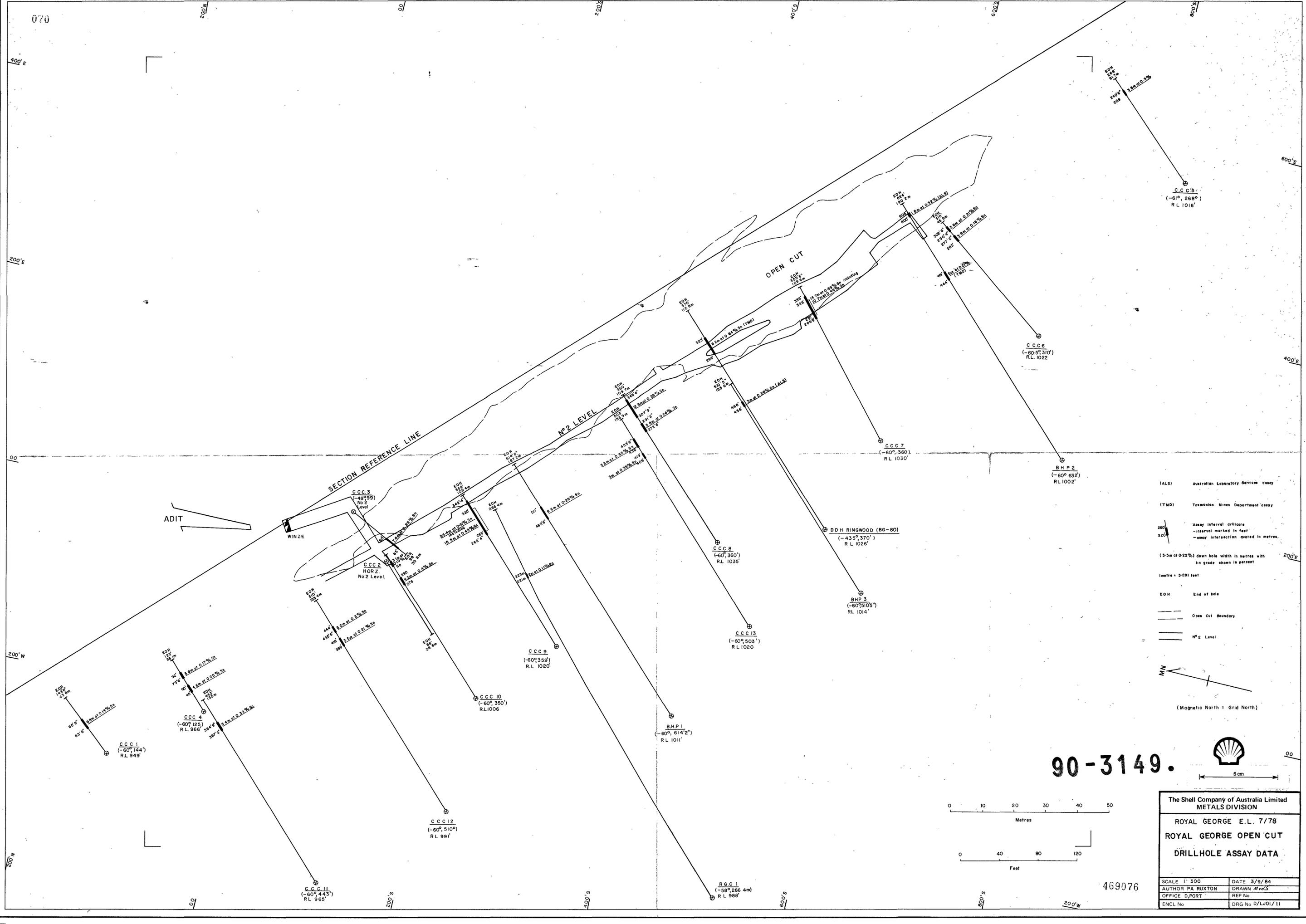


469075

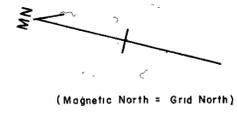
The Shell Company of Australia Limited  
METALS DIVISION

ROYAL GEORGE E.L. 7/78  
ROYAL GEORGE OPEN CUT  
DRILLHOLE AND UNDERGROUND  
GEOLOGY

SCALE 1:500	DATE 3/9/84
AUTHOR P.A. RUXTON	DRAWN M.P.S.
OFFICE D.PORT	REP. No.
ENCL No	DRG No D/LJ01/10



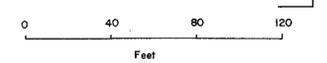
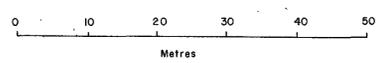
- (ALS) Australian Laboratory Services assay
- (TMD) Tasmanian Mines Department assay
- Assay interval drillcore  
- interval marked in feet  
- assay intersection quoted in metres.
- (3.5m at 0.22%) down hole width in metres with  
in grade shown in percent  
metre = 3.281 feet
- EOH End of hole
- Open Cut Boundary
- Nº 2 Level



90-3149.



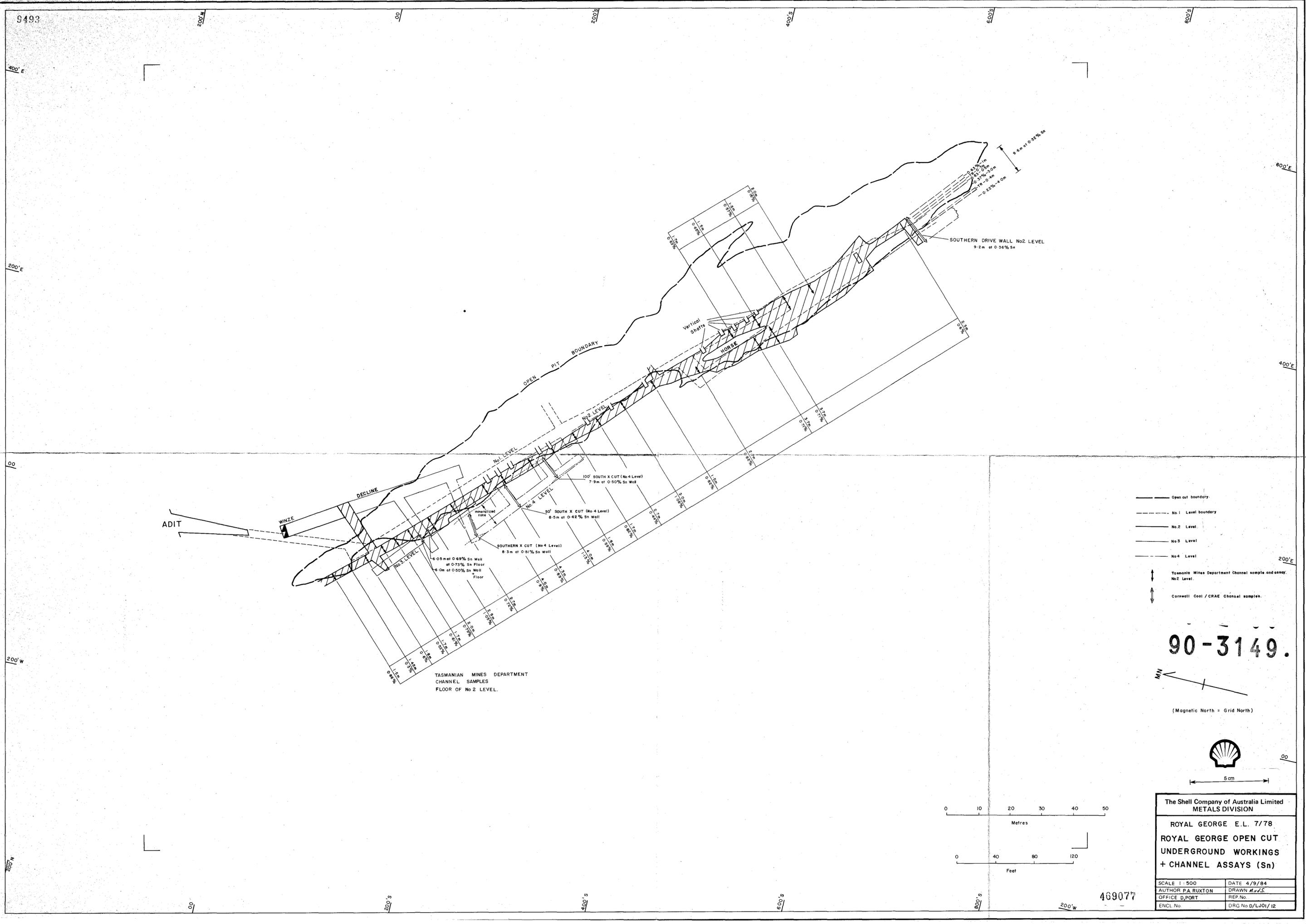
5cm



469076

The Shell Company of Australia Limited METALS DIVISION	
ROYAL GEORGE E.L. 7/78	
ROYAL GEORGE OPEN CUT	
DRILLHOLE ASSAY DATA	
SCALE 1" = 500'	DATE 3/9/84
AUTHOR PA RUXTON	DRAWN MRS Z
OFFICE D, PORT	REP No
ENCL No	DRG No D/L001/11

9493



TASMANIAN MINES DEPARTMENT  
CHANNEL SAMPLES  
FLOOR OF No. 2 LEVEL.

- Open cut boundary
- - - No. 1 Level boundary
- No. 2 Level
- No. 3 Level
- No. 4 Level
- ↑ Tasmania Mines Department Channel sample and assay, No. 2 Level.
- ↑ Cornwall Coal / CRAE Channel samples.

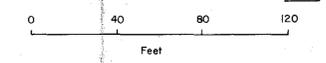
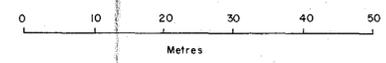
90-3149.



(Magnetic North = Grid North)

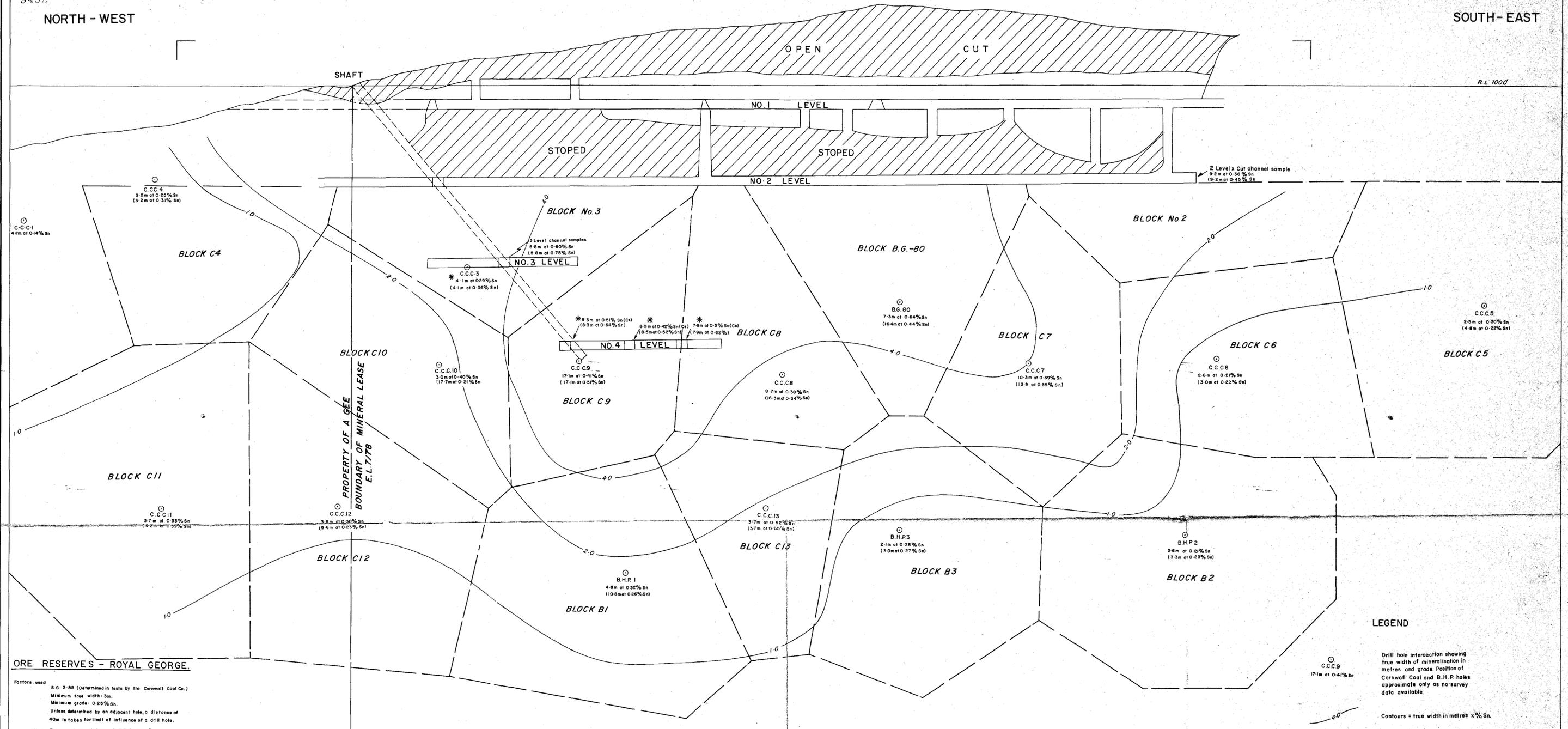


5 cm



The Shell Company of Australia Limited METALS DIVISION	
ROYAL GEORGE E.L. 7/78	
ROYAL GEORGE OPEN CUT UNDERGROUND WORKINGS + CHANNEL ASSAYS (Sn)	
SCALE 1:500	DATE 4/9/84
AUTHOR P.A. RUXTON	DRAWN M.P.S.
OFFICE D.P.O.R.T.	REP No.
ENCL. No.	DRG No D/LJ01/12

469077



ORE RESERVES - ROYAL GEORGE.

Factors used  
S.G. 2.85 (Determined in tests by the Cornwall Coal Co.)  
Minimum true width: 3m.  
Minimum grade: 0.20% Sn.  
Unless determined by an adjacent hole, a distance of 40m is taken for limit of influence of a drill hole.  
Note: Reserves have not been calculated above 2 Level.

BLOCK	Sn	U	Zn	Cu	Ag
BLOCK C 11	0.39%	27	850	370	3
BLOCK C 12	0.30%	30	1390	660	6
BLOCK C 4	0.25%	105	2700	320	5
BLOCK C 10	0.40%	32	2090	550	12
BLOCK No 3	0.60%	41	3190	870	15
BLOCK C 9	0.41%	3000	840	17	
BLOCK B 1	0.32%	19	1110	740	11
BLOCK C 8	0.38%	26	1530	910	13
BLOCK C 13	0.52%	24	1640	1250	22
BLOCK B.G.-80	0.64%				
BLOCK C 7	0.39%	23	2870	530	10
BLOCK No 2	0.36%	56	2450	940	8
<b>590,560 tonnes</b>	<b>0.41%</b>	<b>33</b>	<b>2140</b>	<b>730</b>	<b>12</b>

REVISED ORE RESERVES- ROYALGEORGE:  
ASSUMING 25% INCREASE IN INDIVIDUAL SAMPLE VALUES

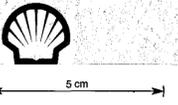
Factors used  
S.G. 2.85 (Determined in tests by the Cornwall Coal Co.)  
Minimum true width: 3m.  
Minimum grade: 0.20% Sn.  
Unless determined by an adjacent hole a distance of 40m is taken for limit of influence of a drill hole.  
Note: Reserves have not been calculated above 2 Level.

BLOCK	TONNES	Sn GRADE
C 11	56,210	0.39%
C 12	105,520	0.23%
C 4	18,810	0.31%
C 10	134,300	0.21%
No 3	35,800	0.75%
C 9	115,770	0.51%
B 1	115,600	0.26%
C 8	112,810	0.34%
C 13	46,610	0.44%
B.G.80	122,440	0.44%
C 7	103,590	0.39%
No 2	45,190	0.45%
C 5	61,890	0.22%
C 6	25,550	0.22%
B 2	40,260	0.23%
B 3	28,410	0.27%
<b>TOTAL</b>	<b>1,168,760</b>	<b>0.34%</b>
	<b>(3,970 TONNES TIN)</b>	

**LEGEND**

- Drill hole intersection showing true width of mineralisation in metres and grade. Position of Cornwall Coal and B.H.P. holes approximate only as no survey data available.
- Contours = true width in metres x% Sn.
- Revised intersections assuming 25% increase for tin value for individual samples.
- Ore block boundaries.
- Not included in ore Reserve Calculations.

90-3149.



The Shell Company of Australia Limited  
METALS DIVISION

ROYAL GEORGE E.L.7/78  
ROYAL GEORGE OPEN CUT  
CRA ORE RESERVE CALCULATIONS  
(J. PURVIS - MAY 1981)

LONGITUDINAL SECTION IN THE PLANE  
OF THE LODE SYSTEM LOOKING N.E.

SCALE 1:500	DATE 3/9/84
AUTHOR P.A. RUXTON	DRAWN M.v.d.S.
OFFICE D.PORT.	REP.No.
ENCL.No.	DRG.No D/LJ01/13

469078